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## Article

# Interest representation and industrial relations in the age of digitalization – an outline

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*Berndt Keller\**

## Interest representation and industrial relations in the age of digitalization – an outline\*\*

### Abstract

The article deals in an interdisciplinary perspective with the consequences of progressive digitalization processes which are controversially discussed in the current discourse for the dual system of employment relations. After initial comments, the first part deals with the changing contours of forms of interest representation in the existing economy, i. e. requirements and options for works councils and trade unions. The second part focuses explicitly on the platform economy and its emerging forms of corporate actors, trade unions and works councils as well as platform operators/employers. The third part concentrates on perspectives of employment relations for the established economy as well as for platform work. The fourth part elaborates on measures of regulation that should be taken at company and sectoral level. A short outlook concludes the article. Processes of digital transformation have the tendency to weaken the existing institutions of labor markets, in particular forms of employees' representation.

Keywords: Digitalization, employment relations, trade unions, interest representation. JEL: J51, J53, J58, J83, J88

### Interessenvertretung und Arbeitsbeziehungen im Zeitalter der Digitalisierung – ein Überblick

#### Zusammenfassung

Der Artikel behandelt in interdisziplinärer Perspektive die im aktuellen Diskurs kontrovers diskutierten Folgen der fortschreitenden Digitalisierung für das duale System der Arbeitsbeziehungen. Nach einleitenden Bemerkungen geht es im ersten Teil um die sich verändernden Rahmenbedingungen von

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Formen der Interessenvertretung in der derzeitigen Wirtschaft, d. h. um Anforderungen und Optionen für Betriebsräte und Gewerkschaften. Der zweite Teil konzentriert sich explizit auf Plattformen und die sich herausbildenden Formen korporativer Akteure, Gewerkschaften und Betriebsräte ebenso wie Plattformbetreiber/Arbeitgeber. Der dritte Teil erfasst die Perspektiven der Arbeitsbeziehungen für die bestehende Wirtschaft ebenso wie für Plattformarbeit. Der vierte Teil geht auf Regulierungsmaßnahmen ein, die auf Betriebs- und Sektorebene eingeführt werden sollten. Ein kurzer Ausblick beschließt den Artikel. Die digitale Transformation weist die Tendenz auf, die bestehenden Institutionen des Arbeitsmarktes, insbesondere die Arbeitnehmervertretungen, zu schwächen.

Stichwörter: Digitalisierung, Arbeitsbeziehungen, Gewerkschaften, Interessenvertretung

## 1. Introduction and Delineation

In the context of the extensive discourse on problems of incrementally advancing digitalization, different forecasts about overall employment effects and especially their substitution potentials are made (Frey & Osborne, 2013; Brynjolfsson & McAfee, 2014; for Germany Wolter et al., 2016; Arntz, Gregory, & Zierahn, 2018). Furthermore, perspectives are discussed especially for individual working conditions such as work requirements and performance control (Gerber & Krzywdzinski, 2019). On the other hand, the perspectives of collective interest representatives or employment relations (in the following ER) receive much less attention.

This constellation raises the question of the consequences of the fundamental changes in traditional corporate structures, the collective organization of work and the various forms of work for the existing institutions of ER (“industrial relations”).<sup>1</sup> In broadening the current discourse, we deal not only, as is frequently the case, with institutions of employee representation, i. e. works councils and trade unions. But we also integrate other participants, i. e. platform operators/employers as new corporate actors and the state as regulatory agency, as well as changes in the system of ER. We focus on their interactions and options for changes in public regulation as well as private governance. Our initial hypothesis is that, as in all previous “industrial revolutions“, fundamental transformations of the institutional framework will take place, that there will be a “digitalization of industrial relations” (Pfeiffer, 2019, p. 239).

In the following, the encompassing and frequently indefinite consequences of digitalization will be sub-divided into two major parts. This analytical distinction is necessary because, as we will demonstrate, the expected far-reaching outcomes for ER are quite different. The first part relates to the consequences in the manufacturing as well as private service sectors of the existing economy. Here we focus on the changing contours of established works councils and trade unions (section 2). The second part refers to the consequences of the introduction of various forms of new platform work, including crowd work as well as gig work. Here we emphasize emerging forms of interest representation and

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1 In contrast to other authors (Askitas, Eichhorst, Fahrenholtz, Meys, & Ody, 2018), we explicitly distinguish between employment relations and social dialogues, which are characterized, among other things, by strictly differing degrees of binding nature of their outcomes. With regard to platforms, we only deal with work platforms and make no distinction between gig work and crowd work.

platform operators (section 3). Then we elaborate on general as well as platform specific perspectives of ER (section 4). Next we change our perspective towards the normative issue and ask what should be done (sections 5). A short outlook concludes the article (section 6).

In dealing with these questions, as is customary for the dual ER of Germany, we separate the company and the sectoral level, whose representations of interests remain legally independent of each other, but in fact closely cooperate (Keller, 2008; Müller-Jentsch, 2016). We focus primarily on developments in Germany, but take up parts of the international literature as far as it deals with comparable changes and problems. We focus on the social science analysis of ER and, as a matter of space, ignore the extensive legal and historical analyses. We also deal only in passing with questions of the future regulation of new or changing ER by means of legislative intervention (Keller & Seifert, 2020), which can take place at both national and European level.

We present a secondary empirical analysis that condenses current considerations and results of different provenance in a meta-study without presenting own empirical data. The value added is the provision of a more comprehensive overview than studies on specific topics have to offer. Thus, substantive and procedural interactions of corporate actors at different levels can be detected more easily.

## 2. Changing Contours of Forms of Interest Representation

### 2.1 Works Councils

Apart from trade unions, works councils constitute the most important “collective voice” institutions. The Works Constitution Act (in the following BetrVG) offers them a number of graduated information, consultation and co-determination rights in digitalization projects, which can be classified as follows (Matuschek & Kleemann, 2018):

- Par. 87 (1) the right of co-determination in the introduction or application of technologies which may be used to control behavior and performance;
- Par. 111 rights of information and participation in the event of fundamental changes in the organization of the establishment, the purpose of the establishment and the facilities, or the introduction of new working methods and manufacturing processes;
- Par. 77 enables the conclusion of works agreements which can develop into a central instrument for influencing digitalization processes; their range is changing qualitatively and is expanding significantly in quantitative terms.<sup>2</sup>

Reactions of employee representatives differ significantly. Works councils, in a similar way to trade unions, frequently react in a defensive manner to technological and organizational changes (Haipeter, 2019; Bosch, Schmitz, Haipeter, & Spallek, 2020). They are now faced with significant additional or even new problems with regard to their insufficient “digital competence“, including their participation in the planning, introduction and subse-

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2 On works council rights at crowdsourcing in detail Klebe (2015), on the rights of crowd workers as an overview Däubler (2015).

quent monitoring or evaluation of already implemented measures. The willingness of management to bilateral cooperation instead of unilateral determination of rules, including far-reaching transparency and early information on intended actions, is also a necessary, but frequently not existing precondition as well as the willingness of works councils to cooperate with management.

The subjects of future tasks and responsibilities are different fields of action, which they can tackle primarily by concluding work agreements with management:

- securing employment or status quo in the case of restructuring and rationalization measures,
- grouping (as well as securing pay) in the event of reorganization of jobs,
- further education and qualification measures (possibly retraining and vocational reorientation) due to changes in work requirements, including the organization of the necessary “lifelong learning”,
- questions of personnel assessment and planning in the event of changes in work organization,
- behavioral and performance control of employees (e.g. in the case of work intensification),
- data protection and security,
- health and safety at work (as well as protection and promotion of health),
- use and design of workers’ rights such as co-determination,
- design forms of mobile work (including telehome work/home office),
- introduction and implementation of changed working time models (including further flexibility of working time)

(Hadwiger, Stracke, & Wilke, 2017; Haipeter, Korflür, & Schilling, 2018; Haipeter, 2019).<sup>3</sup>

A striking example far beyond all traditional bargaining objects such as wages and working hours are – in addition to training and qualification measures – above all data protection and security of personal or employment-related data (Hornung & Hofmann, 2019), for example in the case of the introduction and subsequent utilization of algorithms. They have been widely used for a number of years, including computer-supported (pre-)decisions on personnel selection (“matching”), performance and remuneration assessment and tracking not only in the case of coordination, but also in the case of control and monitoring of employees.

The use of algorithms that provide management with additional capabilities of performance and behavioral control can put individual groups at a disadvantage, for example by characteristics such as gender, color, social stratum or related rating methods (“statistical discrimination”). The problems of these digitally based business models are their missing transparency and uncontrolled “algorithmic bias” or, in other words, difficulties in estab-

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3 Works councils see the greatest need for action in the following areas: staff assessment, work intensity, employment security, qualification, work-life balance, health protection, limits for regular working hours, the protection of performance and behavioral controls (Ahlers, 2018; cf also Berger & Iller, 2019). Examples of existing works agreements can be found at Maschke, Merich, & Werner (2018) and Greef, Schroeder & Sperling (2020); Baumann, Mierich, & Maschke (2018) deal with current trend topics.

lishing transparency and allowing traceability instead of the existing “black box” of company secrets. These new problems fundamentally change the tasks and responsibilities of the works councils in influencing decisions taken by management.<sup>4</sup>

Works councils are confronted with information imbalances and power asymmetries, fundamental uncertainty about intentional and non-intentional prospects for future developments, lack of expertise, concerning, among others, algorithms or artificial intelligence, as well as high speed of change. They are hardly able to generate the transparency they need for the negotiation and implementation of effective works agreements (for details Matuschek & Kleemann, 2018, 2019). Their expanded or additionally new, in any case heterogeneous catalogue of tasks can lead, due to their limited resources, to an overload of tasks and requirements.<sup>5</sup> Their occasionally missing commitment can (also) be explained by this overload.

Last but not least, it is astonishing that the current discourse on “Co-determination 4.0“, which is shaped by interest policies, does not deal with both variants codified in German laws, i.e. at the workplace and the company level, but exclusively with the workplace level. The introduction and implementation of digitalization measures can also be influenced by employee representatives in the executive board and supervisory board, but requires expanded options for action including more precise information. If even companies in their previously known, vertically integrated forms as organizational places of work hardly – or no longer – exist or mutate into “web page enterprises” (Davis, 2016) or are integrated into value creation chains, these developments all the more have consequences for the traditional forms at company level: This variant of co-determination in organizational decision-making continues to erode as a result of the advancing digitalization. Surprisingly, the potential benefits of “employee voice” for performance and competition (such as productivity and profit) (Jirjahn, 2011, 2016) are not addressed.

## 2.2 Trade Unions

Established trade unions face the need of necessary adjustments both internally and externally. The organization of previously non-organized groups of employees, which exist not only in the growing industries, constitutes a central problem. Especially in times of declining density ratios of less than 20 percent (Ebbinghaus & Göbel, 2014; Hassel & Schroeder, 2019) and rapidly changing labor market structures this question must be answered in order to recruit new members and to solve financial problems. One relevant group are the solo self-employed, i. e. self-employed who, unlike “classical” self-employed (such as doctors, architects or lawyers) work without other dependent employees. Traditionally, they do not belong to the “typical” clientele of trade unions. Opening up the opportunity of membership to this group is proving to be a necessary step of adjustment. The problems vary due to spe-

4 On the “algorithmic management” of working organizations Lee, Kusbit, Metsky, & Dabbish (2017) and Kels & Vormbusch (2020), on the influence on working conditions Rosenblat (2018). An external offer for the work of works councils provides Trusted AI GmbH (<https://www.trusted-ai.com/>).

5 On the systematic use of automated systems in works council work, which has been neglected to date, <http://www.blog-zukunft-der-arbeit.de>

cific sectoral conditions and organizational domains, as shown by the examples of individual trade unions in both the industrial and service sectors:

- Ver.di, the United Services Union, organizes approx. 30,000 solo self-employed, “... a substantial number, although it is a small fraction of its total membership ...” (Fulton, 2018, p. 37). In almost all departments, in addition to the complex matrix structure (Keller, 2004), there are special groups and special association structures for “non-permanent forms of employment”. Ver.di has a “Free and Self-Employed Unit” as well as Mediafon GmbH, a specific service and advice offer by qualified experts (“Self-employed advise self-employed”)<sup>6</sup> (Mirschel 2015, 2018). These services, which are related to working conditions in an encompassing sense, are available irrespective of the possibility of collective bargaining.
- In recent years IG Metall has also initiated several initiatives (for details Askitas, Eichhorst, Fahrenholtz, Meys, & Ody, 2018, pp. 30–31; Aloisi, 2019; Kramer, 2019). At the beginning of 2016, a change in the statutes opened up the possibility of membership for other groups. “The 2003 labor reform in Germany provided the impetus for IG Metall, a traditional export oriented union, to develop an aggressive and inclusive membership outreach program targeting non-standard workers to stave off use. Greater use of non-standard employees in unionized workplaces risked deteriorating industry standards achieved through collective bargaining... Since 2007, the union has sought to recruit temporary and agency workers, and is now actively involved in gig and platform worker outreach.” (Johnston & Land-Kazlauskas, 2018, p. 8) In addition, IGM is a member of the European initiative “Faircrowdwork”<sup>7</sup> and has co-established an ombudsman office for crowd workers to settle disputes between platform operators and crowd workers.
- NGG, the Union for Food, Beverages, and Catering, is also affected because of its organizational domain in private service sectors. NGG provides advice on the formation of individual works councils.<sup>8</sup>

In general, it has to be assumed that all trade unions are affected by the industry-wide consequences of advancing digitalization and not only the two major ones, IG Metall and ver.di, which have been leading the trade union discourse to date and have been focusing on platform work. This raises fundamental questions for the smaller trade unions, which mainly organize the private service sectors: Are they able, due to their limited financial and human resources, to take long-term initiatives similar to those of the large (multi-)sector unions and to respond to sector-specific challenges by changing not only their company and bargaining policies, but also their membership policy.

Changes to open up membership to other groups are just beginning (on similar developments in other countries Aloisi, 2019). In the sense of sustainable development they constitute a necessary but not yet sufficient condition for further activities. The representation

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6 [www.me-diafon.net](http://www.me-diafon.net)

7 IGM: [www.faircrowdwork.org](http://www.faircrowdwork.org), ver.di: [www.cloud-crowd.verdi.de](http://www.cloud-crowd.verdi.de), [www.ich-bin-mehr-wert.de/support/cloud-working/](http://www.ich-bin-mehr-wert.de/support/cloud-working/). For details and reviews Haipeter & Hoose (2019); Kramer (2019).

8 At IGBAU, the Union for Construction, Agriculture, Environment, employees mainly affected by outsourcing continue to be members (Pongratz & Abbenhardt, 2018).

of the interests of employees in standard (or normal) employment continues to dominate. Traditionally, as at present, the density ratios of all groups of atypical employees are lower than those of employees in standard employment (Ebbinghaus, Göbel, & Koos, 2009, 2011; Schlese, 2015; OECD, 2019).

In the age of Taylorist-Fordist mass production technology, the organizational principle of the industrial trade union (“one company, one trade union”) dominated. It reaches its limits under the auspices of foregoing digitalized transformation when companies in their previous hierarchical forms no longer physically exist or mutate into virtual “market places”, existing industry boundaries continue to disintegrate, supply and value chains become longer and more protracted, and even the identification of the employer is difficult. Thus, the traditional borders of the organizational domains of industrial trade union fade.

Similar to technological changes in the past (in summary for classic models of interest representation Müller-Jentsch, 1985, 2016; Streeck, 1993, 2005) the alignment of organizational forms with major changes in labor market structures turns out to be necessary (Vandaele, 2018a, 2018b; Johnston, 2020). A comparative study distinguishes four types for the above-mentioned group of solo self-states alone: specialist unions, precarious workers’ unions, unions for self-employed only, mainstream unions (Fulton, 2018, p. 10).

In addition to new forms of organizational experimentation, there is also the need for offers of new, individualized services for members. The aim consists of an internet-based, sector-specific exchange of information and experience, and the mutual advice and assistance in the event of conflicts. In the case of the already mentioned group of solo self-employed, the extended range of services includes tax questions, case-related social insurance and copyright law, including legal assistance in demands of fees. In the case of crowd workers, we elaborate on next, independent assessments of the reputation and ranking systems of platforms are specific requirements. New options for action on the way to the “smart union” – as counterpart to the “smart factory” – the new form of automated legal advice and representation (“legal technology”) can also be used to support works councils and union members.

Externally, there is a need for closer cooperation (IG Metall, 2016; ILO, 2017). New forms, for example along transnational value-added chains, are gaining in importance – both at national and international level. In this respect, it is also a question of an additional dimension of the trade union renewal, which has been dealt with for quite some time (Frege & Kelly, 2004).

### 3. Interest Representation in the Platform Economy

A recent study concludes in a comparative perspective: “On the whole, evidence for the platform economy connecting with industrial relations is anecdotal.” (Kilhofer, Lenaerts, & Beblavý, 2017, p. 1; similar Askitas, Eichhorst, Fahrenholtz, Meys, & Ody, 2018) The current extent of crowd work, a rather unusual three-way form of employment between contractor, platform operator and crowd worker, is still low. However, according to all available information, its growth potential has to be viewed positively (Eurofound, 2018a). In addition, broader effects may occur in other more “traditional” forms.



### 3.1 Trade Unions

In this still “contested terrain” in the platform economy, the trade unions face the problem of uncertainty or incomplete information about the future development of employment and its forms, especially crowd work. Therefore, in all attempts to exert influence in these zones of uncertainty, there is an incalculable risk of not making the best use of scarce resources – which may (partially) explain the hesitant attitude of the trade unions. The different levels of dissemination of new technologies between companies and industries also make it difficult to influence developments.

Technological developments towards the digital economy have the inherent tendency to weaken the existing institutions of the labor market, especially employee representations (ILO, 2017; Crouch, 2018). A recent comparative study concludes: “A lack of union representation and organizing power, the oligopoly of but a few platforms offering certain types of tasks and constant as well as legal insecurity result in a massive imbalance of bargaining power, noticeable primarily in low wage rates and heavily slanted terms and conditions in platform use agreements.” (Prassl & Risak, 2017, p. 276) In the case of ER, which are still characterized by their dual character, these problems arise at both company and sectoral level. They are related to the already known precarious risks especially but not exclusively of atypical-unstable forms of employment (Keller & Seifert, 2013) – and are reinforced by the digital transformation.

As far as the organization of employees is concerned in our context, the distinction between joining traditional associations and establishing new, independent ones is relevant (for an international comparison Kilhofer, Lenaerts, & Beblavý, 2017). The latter are particularly dependent on changes in employment forms and in sectors which are difficult to organize for established trade unions (for professional associations of self-employed Askittas, Fahrenholtz, Meys, & Ody, 2018, pp. 28–29). Other difficulties of mobilization are high rates of fluctuation, non-conventional establishments and non-permanent jobs, lack of opportunities for contact and communication with other employees, and persistent opposition of various platform operators to the formation of interest groups. Heterogeneity and fragmentation of organizational forms are increasing (for the UK TUC, 2017; on the history Al-Ani & Stumpp, 2015; international comparative World Bank, 2018).

Recent studies indicate ambivalent attitudes towards interest representation (Leimeister, Durward, & Zogaj, 2016; Al-Ani & Stumpp, 2018; Eurofound, 2018a). One reason is the fact that crowd work is predominantly exercised as a secondary activity, with low-income, irregularly and not permanently.<sup>9</sup> Therefore, as with similar ones, especially various atypical forms of employment, there is only a low willingness to join trade unions whose difficulties of organizing are considerable. The fact that the company, the traditional nucleus for the organization of employees, often no longer exists physically, is another reason for abstinence.

The group of crowd workers is (still) small. However, as already mentioned, according to consistent estimates their number will continue to increase and will therefore be relevant to unions. A recent study concludes that “the results point to a lack of union activity in

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9 A recent study puts it in a nutshell: “low hours and low income” (Drahokoupil & Piasna 2019, p. 16). The proportion of students is high.

reaching out to riders as a reason for their non-membership. Engaging with them may offer trade unions a window of opportunity to win trust and demonstrate the added value of union membership in their school-to-work transitions” (Vandaele, Piasna, & Drahakoupil, 2019, p. 4). The indicated different types of platforms are to be regarded as “a new type of economic institution” (Eurofound 2018c, p. 15) or “as a hybrid between organization and market” (Kirchner, 2019; similar Eurofound, 2018c). At present, the question of their influence on the efforts to organize these employees remains unanswered.

Within the organization, the problem arises that the range of interests to be represented becomes more heterogeneous due to the specific items of individual groups, such as crowd and cloud workers. This increasing diversity makes the necessary processes of interest aggregation, internal integration and filtering, as well as external representation and implementation, even more difficult than it was the case in the past. From a long-term perspective, “The *job* had replaced the *career*. Jobs were always temporary, even if they were not labeled that way explicitly. But now the *task* may be replacing the *job*.” (Davis, 2016, p. 512)

From the employees’ side, one reason for the development of some independent “quasi-trade unions” is the fact that these groups constitute only a minority of the members in industrial trade unions (encompassing organizations in the sense of Olson, 1968, 1985). They can hardly form a “critical mass” and their specific and heterogeneous interests are not, or at least not primarily, represented (for solo-self-employed Pongratz & Abbenhard, 2018).

In comparisons, there are other, currently unusual examples: In New York there is the Freelancers Union (Al-Ani & Stumpp, 2018). “Through associations such as these, they exchange experiences, seek advice, even lobby on work – and welfare-related issues.” (EPSC, 2016, p. 7) There are wide-ranging examples in several countries (for Europa Vandaele, 2018a, 2018b; Vandaele, Piasna, & Drahakoupil, 2019, p. 201; Eurofound, 2018b; Degner & Kocher, 2018; Johnston 2020; for the USA Cohen, 2015; Collier, Dubal, & Carter, 2017; Stone, 2017<sup>10</sup>).

### 3.2 Works Councils: Recent Examples and Their Limits

Recent examples of these developments are (for details Haipeter & Hoose, 2019; Heiland & Brinkmann, 2020; Greef, Schroeder, & Sperling 2020):

- In mid-2017 a works council was formed at Deliveroo. Its members had, without exception, fixed-term contracts. Their employment contracts were not been renewed, a practice which the statutory framework allows.<sup>11</sup> As the drivers were subsequently employed as solo self-employed, they did not have the typical rights of dependent employees.

10 For more detailed information <https://drivers-united.org/> and <https://www.gigworkerscollective.org>

11 The vast majority do not work full-time. In addition to employees with fixed-term contracts, freelancers dominate.

- At Lieferando, the “Supply at the Limit” initiative (similar for Italy Tassinari & Maccarone, 2017) was founded against the opposition of the management.<sup>12</sup>
- The small, anarcho-syndicalist Free Workers’ Union (FAU)<sup>13</sup> is trying, among other things, to organize the bicycle food suppliers (from Deliveroo and Foodora) in several cities with its “Deliverunion” initiative (Schreyer & Schrape, 2018).<sup>14</sup> The FAU benefits from the indicated difficulties of the established trade unions.

These emerging forms of interest representation, which are, in comparison to the established ones, hardly institutionalized are usually job-specific and rarely broad-based. A delineation of relatively autonomous internal structures has not yet taken place. They take on tasks of the dissemination of information, the placement of labor supply and demand, as well as the protection and improvement of working conditions, including solo self-employed and hybrid workers (Lorquet, Orianne, & Pichault, 2018). In contrast to established unions their priority is not collective bargaining (Johnston & Land-Kazauskas, 2018).

Overall, they constitute a weaker form of “collective voice” compared to the traditional ones.<sup>15</sup> The results of their activities so far are (still) rather limited, and their prospects are uncertain. A comparative study concludes: “... the forums and tools seem to hardly relay to industrial relations and social dialogue but rather act as an information tool, and the strikes show little concrete outcomes so far.” (Eurofound, 2018b, p. 104)

At present, it is not possible to answer the question of whether these emerging forms of mobilization or interest representation are to be regarded as only temporary stages or as permanent alternatives to established trade unions. In the medium and long term, different relationships can develop between both forms. A comparative study concludes: “The examples show that self-organization first occurs and then a separate trade union develops out of it, or trade unions can then co-opt or cooperate with them.” (Al-Ani & Stumpp, 2015, p. 47; own translation)<sup>16</sup> However, it cannot be excluded that these first activities of forms of self-organization have signaling effects for other groups.

The current great interest in these forms of interest representation cannot conceal their fundamental problems: the few outlined examples cannot be generalized.<sup>17</sup> This is due to the fact that the conditions of organizing differ considerably between types of platforms (Eurofound 2018a; Vandaele, Piasna, & Drahakoupil, 2019). The typologies have been set up for various purposes (as current, broad overviews Leimeister, Durward, & Zogaj, 2016;

12 <https://de-de.facebook.com/liefernamlimit/> Demands include cost recovery for repairs and equipment (such as bicycles, smartphones and work clothes), wage increases, transparent patterns of shift schedules. The long-term objective is to conclude a collective agreement. The initiative engages in public relations, organizes rider meetings and has set up a WhatsApp group to exchange information on working conditions.

13 <http://www.fau.org/>

14 In addition, the “Alliance of The Free Arts” ([www.allianz-der-freien-kuenste.de](http://www.allianz-der-freien-kuenste.de)) has been in existence since 2017.

15 A comparative study distinguishes four forms: trade unions, online forums, worker centers, worker cooperatives (Johnston & Land-Kazauskas, 2018).

16 In an international comparison, the OECD concludes that new forms of organization complement, not replace, the old ones (OECD, 2019). Another comparative study shares this view (Vandaele, 2018a, p. 6).

17 For reasons of easier field access, the current research interest is focused on a small proportion of platform workers.

Kilhofer, Lenaerts, & Beblavý, 2017; Eurofound, 2018b, 2018c). They differ significantly according to the type or quality of the products and services submitted to the contractors and/or the necessary qualifications for gigs or jobs (e.g. micro-task, marketplace, testing, design, and innovation).

A typology that distinguishes according to location is helpful for our problem. In the case of “on-location platforms”, especially for delivery and transport services as well as possibly for domestic and personal services, the organizing conditions are relatively favorable, *inter alia* because of their local or regional proximity despite “decommissioning” and the existing informal contact options; the necessary “critical mass” can therefore be achieved more easily. This is the case in comparison with other platforms, whose “independent contractors” or self-employees are geographically isolated from each other and therefore difficult to address.<sup>18</sup>

The establishment of an interest representation is a necessary but not yet sufficient condition for its long-term existence. The few existing initiatives are of purely voluntary nature and do not have any institutional protection. Furthermore, they take place exclusively in a particular segment of platforms, namely those for simple activities which do not require any special qualification. The clear majority of individual contractors who work on platforms still have no representation of interests – and thus no opportunities for participation.<sup>19</sup> A comparative study concludes: “Platform workers do not have much by way of conventional forms of representation. The isolated and piece-meal structure of platform work complicates the will to (self-) organize, and generally, there is weak trade union representation of platform workers.” (Eurofound, 2018b, p. 100)

These first and rare “grass-root unions” are experiments of self-organized forms of collective interest representation and solidarity. For various reasons, their “bottom up” foundation does not mean their long-term protection (in summary for the labor law problems Degner & Kocher 2018). Formulated in the analytical categories of the power resource approach (Arbeitskreis Strategic Unionism, 2013; Gumbrell-McCormick & Hyman, 2013; Schmalz & Dörre, 2014):

- Their market or primary power is generally low due to low qualifications and therefore the interchangeability of the employees.
- Their secondary or organizational power is weak due to their low levels of organization and lack of collective resources.
- Institutional power, a necessary prerequisite for collective bargaining and, if necessary mobilization in strikes as an outflow of bargaining autonomy and freedom of coalition does also not exist.
- There is also no discursive (communicative) power aimed at external support, for example through strategic alliances with social movements or political parties.

These findings apply to the majority of platform employees, except for a small number of high-skilled experts (“digital natives“) who, because of their existing market power, have

18 Examples are Deliveroo, Helpling, and Uber on one side, Mechanical Turk and Upwork on the other.

19 We only consider external platforms. In the case of internal ones, the conditions may be more favorable if there is a representation of interest. There is no information on the organization conditions on specific platforms with high qualification requirements (including design, innovation) and their working conditions.

more favorable options for individual representation of interests and hardly need collective forms.<sup>20</sup> Despite the first attempts of organizing, the considerable structural power gap in the platform economy remains, in part because of the unequally distributed resources, the lack of transparency and tendencies towards the formation of monopolies on the part of the platform operators. The setting, monitoring and sanctioning of collective rules is mainly carried out by management and its unilateral rights. Generally, the following applies: "... in companies, industries or occupations where workers are organized into powerful unions, employers are more likely to offer good jobs. In turn, where workers are more vulnerable, lacking voice and without alternative job opportunities, employers may decide to offer jobs of poorer quality and lower pay irrespective of workers' skills or productivity" (Grimshaw, Fagan, Hebson, & Tavora, 2017, p. 13).

### 3.3 Platform Operators/Employers

The platform operators are new corporate actors in ER without institutional constraints. They do not define their online workforce as dependent employees, but as solo self-employed or "independent contractors". They do not declare themselves employers in the context of their largely non-regulated, purely market-oriented organizational and business models of "on-demand" work.<sup>21</sup> They continue to make labor markets more "flexible" on the basis of their self-defined management rules and externalize the follow-up problems by strictly rejecting the acceptance of the rights and obligations that have been customary under labor and social law for employers up to now. Therefore: "... at least part of the success of some well-known platforms can probably be attributed to their success in circumventing regulation in the markets in which they operate, hence profiting from unfair competition. Another reason for their success is the weakened position of workers in such platforms compared with traditional firms". (Eurofound, 2018c, p. 19)

By exclusively representing individual interests, they constitute indirect competition for works councils and trade unions and fundamentally call into question the traditional concepts of ER. The consequences of this "organized irresponsibility" are obvious: "... we need to be aware of the fact that the novelty of this business model has the potential to become a major social challenge, as the transformation (or hybridization) of a traditional company into a digital platform means nothing less than the abandonment of the whole field of ER by the entrepreneur. A platform is nothing more than a marketplace for services, in which there is no place for labor laws and social security" (Degryse, 2019, p. 27).

In Germany as in other countries (Daugareilh, Degryse, & Pochet, 2019), the platform operators define themselves exclusively as digital "intermediary agencies" or as mere matching forums, which only offer and demand jobs on "marketplaces" without takeover of the traditional obligations of employers (international comparative Wright, Bamber, Wailes, & Lansbury, 2019). "The mechanisms of digitalization especially undermine traditional unionization efforts as workers are locally dispersed, not formally employed and the market organizers refrain from responsibilities, highlighting their mere intermediary status

20 Lee & Staples (2018) take a different position on these issues.

21 With the alternative "market or hierarchy" as forms of organization/alternative modes of governance (Williamson, 1996) platform operators opt for markets and consider other modes to be less effective.

(Kirchner & Schüßler, 2020, p. 14). They do, regardless of their size, in the face of their increasing power and influence, neither establish independent employers' associations of their own nor do they join existing ones with the aim of representing interests in collective bargaining (Kilhofer, Lenaerts, & Beblavý, 2017).<sup>22</sup>

Platform operators, at least their overwhelming majority, will not take this constitutive step for the development of sectoral ER in the future, either because it would damage their business model for new market forms or, in principle, would call into question their platform economics. The recognition of trade unions as a partner for collective bargaining would mean regulation and is therefore out of the question for them. However, their high-level density ratio – and not the density ratio of trade unions – would be a necessary requirement for collective bargaining with the aim to conclude collective agreements on the sectoral level. Therefore: "... the very nature of the tasks and work organization in platforms makes collective organization less likely than in traditional companies: the manager is an algorithm, co-workers are independent contractors (potentially geographically dispersed and in competition with each other) and the work is often carried out in isolation or in contact only with the client" (Eurofound, 2018c, p. 20).

The principle of bargaining autonomy, which is enshrined in the Collective Bargaining Act (TVG) does not in fact apply; the typical obligations of employers' associations (Behrens, 2011) are not accepted. The current discourse on the generally binding declaration (Par. 5 TVG) is intended to increase the coverage rates that have been decreasing for more than two decades (Ellguth & Kohaut, 2018). However, this rule can only be used in cases of sectoral bargaining. According to the TVG, it presupposes, in addition to public interest, the agreement of a collective bargaining committee which is made up of parity. A fundamental change in the preconditions of legal application is hardly to be expected due to the political majority and asymmetric power relations.

Founded in 2011, the German Crowdsourcing Association (DCV)<sup>23</sup> is the "leading competence center for crowd-based business models in Germany" (own translation). The DCV is not an employer's association in the traditional sense of the separation of employer and economic associations (Behrens, 2011), but rather a "digital intermediary" without organizational and commitment capacity. The DCV does not publish numbers on membership and rejects any new legal framework and advocates exclusively voluntary-private self-regulation. It is a co-signifier of a purely voluntary "Crowdsourcing Code of Conduct"<sup>24</sup> which only provides minimum working conditions (such as fair pay, clear definition of tasks and adequate scheduling, transparent communication, data protection and privacy).<sup>25</sup> The DCV participates in a voluntary neutral ombudsman/conciliation body that is supposed to resolve individual conflicts between platform operators and employees (Ombuds Office, 2020). However, the DCV does not conduct collective bargaining in the traditional sense

22 The considerable internal heterogeneity of interests between platforms for simple and complex services also prevents the formation of homogeneous associations.

23 <http://www.crowdsourcingverband.de/>

24 <http://www.crowdsourcing-code.de/>

25 "IG Metall persuaded eight online platforms to sign a joint statement that they will respect the minimum wage. IG Metall was instrumental in creating FairCrowdWork, which aims to connect the crowd workers with relevant unions and which led to the Frankfurt Declaration on Platform-Based Work." (Kilhofer, Lenaerts, & Beblavý, 2017, p. 30; see also ILO 2018, p. 120)

but prefers weaker “multi-enterprise agreements” (Johnston, 2020, pp. 38–39) as new regulatory forms of regulation.

In view of this lasting stalemate, individual trade unions try something else: “... IG Metall is developing a new approach: to invite clients to sign a voluntary wage pledge. The development of this strategy is still in its infancy but could take a variety of forms. For example, clients could commit to paying workers at least the minimum wage in the worker’s location.” (ILO, 2018, p. 122). The viability of this tactic is difficult to assess.

A structural power imbalance between “both sides of industry” has already existed before the age of digitalization. The present situation reinforces two trends, “the erosion and perhaps collapse of the concept of the employee as a figure with associated rights and duties, and growing power asymmetries between those who control work and those who carry it out” (Crouch, 2018, p. 147). In platform economics, the asymmetry of power also results from the fact that, as the examples of the described delivery services show, platform operators actively resist the establishment of interest representation (Heiland & Brinkmann, 2020). It shows similarities with the well-known methods of “union bashing” (Logan, 2006; Behrens & Dribbusch, 2013, 2014; Bryson, Freeman, Gomez, & Willman, 2019), takes especially the form of “works council bashing” and extends beyond an inadequate information policy towards employees.

All in all, ER in any institutionalized dual form hardly exist in the platform economy. Trade unions face almost insurmountable problems of organizing “independent contractors” and, therefore, density ratios are rather low. There are only few examples of recently established works councils. They have, in contrast to regular works councils, no institutional-legal protection in an unregulated space and their existence as weak “collective voice” institutions is endangered. Furthermore, they are limited to specific types of (“on-location”) platforms and cannot be generalized (Johnston 2020). According to their business model platform operators define themselves exclusively as “intermediary agencies” and strictly refuse to accept the usual duties and responsibilities of employers or to establish employers’ associations. Therefore, collective bargaining in a structured setting does not take place. We discuss potential consequences and remedies of this unusual situation in the next but one section.

## 4 Perspectives of Employment Relations

As in the previous chapters the consequences of digitalization for the development of ER are differentiated in outcomes for the existing economy and outcomes for platform work. We show that growing but different differences are to be expected at company as well as sectoral level of the dual system.

### 4.1 General consequences

As already indicated in some detail, in times of progressive digitalization existing works councils face additional tasks and increasing workloads that add to, and even increase, their already existing difficulties of effective interest representation. Furthermore, in the long term an increasing proportion of employees have no legally legitimate representation.

Unexplained or even ignored in the current discourse on digitalization as a “systemic transformation of the world of work” (DFG application, 2018, own translation) remains a central problem at company as well as sectoral level: The declining coverage rates at company level in private industry are at almost 40 per cent of employees; those at sectoral level have also been falling in the long term to less than 60 percent (Ellguth & Kohaut, 2018). Consequently, the “double” coverage rate required for the uncomplicated functioning of dual ER, i.e. the co-existence of a representation of interests at both levels in the “core zone“, is just under one quarter of employees and also low (Ellguth & Kohaut, 2018). Private services sectors, whose importance for the economy keeps growing, are more affected than manufacturing sectors.

These long term developments have far-reaching consequences for the established dual ER. They contribute considerably to decentralization processes that have been taking place since the 1980s. In a more accurate examination of individual forms (Traxler, 1998), it is a digitalization-specific, broadly uncontrolled (“wild“) variant and not the variant found in other sectors, controlled and organized by the associations of “both sides of industry”.

## 4.2 Specific consequences for platform work

For dual ER, bargaining contracts concluded at sectoral level constitute a necessary prerequisite. Their institutionalization is not to be assumed, because the necessary preconditions for organizational power are lacking on both sides, especially the platform operators.<sup>26</sup> Therefore, the differentiation of the structures characteristic for dual ER, i. e. task-sharing cooperation between the company and sectoral level, is not to be expected. The necessary “bargaining units” cannot be defined, thus eliminating a focal procedure of collective regulation.

The further erosion of coverage rates that have already declined for several decades or the increase of “white spots“, i. e. gaps without any interest representation, is a likely consequence. Because there are no sectoral associations of platform operators as employers, these trends generally weaken the legal-institutional preconditions of dual ER and impair their functioning. “Hence, it is fair to say that the different areas of the platform economy are not fully integrated in the collective bargaining architecture, and it is highly unlikely that industrial relations in the platform economy will look similar to the arrangements in traditional sectors.” (Askitas, Eichhorst, Fahrenholtz, Meys, & Ody, 2018, p. 20)

In addition, the cross-industry activities of platform operators prevent the conclusion of industry-specific collective agreements. A comparative study concludes: “The collective agreements of the industrial age will be unachievable if workers are scattered and systematically placed in competition with each other, and it is hard to see a future for traditional working relationships in a world where digital platforms act as labor market intermediaries.” (Valenduc & Vendramin, 2016, p. 41)

Finally, the idea of organizing collective action, in particular strikes by crowd workers in order to improve their working conditions, does currently not provide a realistic perspective in Germany, apart from their chances of success (international comparative Eurofound,

26 Another exception is the “future collective agreement digitalization” in the insurance sector, which includes regulations on employment protection and qualification.



2018a). The main reasons are twofold, the low potential for interference and the low density ratios on the part of employees, which prevent the establishment of necessary bargaining power, as well as the unwillingness to form or join employers' associations on the part of the platform operators. In the medium and long term, not only forms of mobilization but also forms of industrial conflict are changing.

At most, only individual groups with comparatively favorable conditions for the organization of collective action, such as the above mentioned drivers of delivery services, may develop and use some forms, such as flash-mobs. However, these groups represent only a minority of crowd workers. The few indicated cases of delivery services constitute an example that shows the immense difficulties of establishing interest representation, especially in emerging sectors.

The only potential exception from this scenario could be certain groups of self-employed (BMAS, 2017, p. 174).<sup>27</sup> The factual consequences of their legal option have so far been limited, not only because of the restrictive condition of economic dependence: "... Although the legal conditions for collective bargaining for some self-employed workers are clear, in practice, employer resistance has meant that there are very few collective agreements making use of these rights. Currently agreements covering economically dependent freelancers only exist in public sector broadcasting companies and in some daily newspapers." (Fulton, 2018, p. 48)

In view of the lack of legal-institutional preconditions for the establishment of sectoral collective bargaining, it seems possible, in the medium and long term, at most to conclude collective agreements on specific issues at company level.<sup>28</sup> Even these perspectives are vague, since the industrial disputes, which would be necessary to enforce them, are hardly to organize. From the trade union point of view, the conclusion of a first collective agreement turns out to constitute a fundamental obstacle. If this difficult step is successful at all, it will be problematic at a later point of time to monitor compliance with these agreements, especially if there is no works council that traditionally performs these tasks.

All in all, it has to be expected that formally organized and regulated forms of dual ER in their traditional structures will not come into existence in this growing part of the economy (Pfeiffer, 2019). Trends towards strict deinstitutionalization or fragmentation of ER turn out to be possible and mainly affect private service sectors, among other things, with increased outsourcing by crowd work. As a result, the conflict of power and distribution, which has so far mostly been fought at the sectoral level, is completely shifted to the company level. Some observers go even further in their conclusions: "What is to be feared is the erosion or even the disappearance of the employment relationship. In the platform economy, labor is seen as a virtually inexhaustible global resource, available on demand. Certain authors refer to it as the *Human Cloud*." (Degryse, 2019, p. 30)

27 In comparative perspective: "Several international and regional fundamental labor standards, from ILO Conventions 87 and 98 to Article 6 of the European Social Charter, clearly recognize the self-employed as entitled, in principle, to a variety of collective labor rights, from the right to freedom of 'It's the right to bargain collectively.'" (Countouris & Di Stefano, 2019, p. 38)

28 Among others, the collective agreement on health management at IBM is to be mentioned (Schmidt & Stach, 2015).

## 5 What Could – and Should – be Done

From the methodological perspective of critical rationalism there is no direct path from the descriptive to the normative level (Albert, 1991). We therefore try to separate the descriptive from the normative analysis and now turn to the latter. The aims of our suggestions need to be indicated: the establishment of ER and working conditions comparable to those of dual ER systems. Again we distinguish between the corporate actors on “both sides of industry” as well as the company and sectoral level.

The paths of development resulting from the introduction and use of digital technologies are not strictly technology-determined (Krzywdzinski, Jürgens, & Pfeiffer, 2015; Crouch, 2018; Pfeiffer, 2019), but disclose – similar to previous epochs of structural and technological change – certain scopes of action to private and public actors. These options exist at the company and the sectoral level; we will first deal with the former.<sup>29</sup>

### 5.1 The Company Level

Policy at company level, especially the entanglement of sectoral and company interest representation, constitutes a traditional affair of trade unions (Sperling, 2014). Its importance is increasing as a result of the progressive digital transformation, i.e. the provision of awareness, training and qualification, as well as advisory and support services for works councils becomes more important for trade unions. Otherwise, these tasks are left to external consultants.<sup>30</sup> A specific example illustrates this connection: “Continuous training is not usually one of the core topics of the works council activities. Insufficient time, personnel and technical resources mean that works councils are already mostly lagging behind their statutory participation opportunities when it is a question of continuing training in the company.” (Berger & Iller, 2019, p. 185, own translation)

In addition to the offer of extended training opportunities for works councils to shape technological and organizational changes, trade unions can also provide exemplary works agreements as well as industry and even company-specific consulting services. As we will discuss later, they can create the necessary framework conditions for later works agreements by first concluding collective agreements.<sup>31</sup>

In individual cases, in the metal industry case-by-case advice from trade union project secretaries as well as support for the conclusion of so-called company future agreements has been currently provided (Bosch, Bromberg, Haipeter, & Schmitz, 2017; Haipeter, 2019; Haipeter, Bosch, Schmitz, & Spallek, 2019). However, the spread of these pilot projects, which are intended to serve, among others, as a basis for staff planning and further training, is likely to prove difficult due to a lack of financial and human resources.

29 In this section we focus on problems and perspectives of established indirect forms of interest representation. Cf. for new more direct forms of communication Hoose, Haipeter, & Itermann (2019).

30 A recent example is the “transformation atlas” of IG Metall.  
[https://www.igmetall.de/download/20190605\\_20190605\\_Transformationsatlas\\_Pressekonferenz\\_f2c85bcec886a59301dbebab85f136f36061cced.pdf](https://www.igmetall.de/download/20190605_20190605_Transformationsatlas_Pressekonferenz_f2c85bcec886a59301dbebab85f136f36061cced.pdf)

31 The protections of data that are created during home office establish an additional topic during and after the time of covid-19.

In view of these obviously changed conditions of interest representation, systematic and continuous training and further training turns into a central problem not only for individual employees (Keller & Seifert, 2020) but as well for all members of works councils who face the additional new requests listed before.<sup>32</sup> To complicate matters more, their tasks have to be carried out during complex processes of digital transformation, subject to high degrees of uncertainty about future developments, often diffuse not strategically planned digitalization projects of management, a lack of own resources as well as lacking technical expertise on directions of technological development (Guhlemann, Georg, & Katenkamp, 2018; Matuschek & Kleemann 2019).

The intensification of internal and external cooperation agreements is proving necessary. Conflicts of interest may occur not only between and within works councils, but also between groups of employees that are more heterogeneous than they used to be in the past (Gegenhuber, Ellmer, & Scheba, 2018). In other words, “solidarity” is more difficult to organize than before (Lee & Staples, 2018). These conflicts may restrict the scope for action of works councils, for example because of insufficient consideration of interests of individual groups due to the high selectivity of access to training and qualification measures.

In addition, the spatial and organizational delimitation of the company as a place of organization of work should also lead to consequences. “The institution of a “network works council” is unknown to the BetrVG; with its help the employee side, for example, analogous to a group works council in accordance with Par. 54 et seq. could influence the relevant control bodies of a network alliance” (Hanau & Matiaske, 2019, p. 212, own translation).

Surprisingly rarely dealt with in the current discourse is the question whether the above described rights, which are provided by the BetrVG, are suitable or sufficient to shape the digital transformation processes in the interests (also) of employees.<sup>33</sup> The BetrVG came into force already in 1972 and the last (slight) revision happened in 2001. It was introduced in the age of the uncontested dominance of the Taylorist-Fordist production model and, by definition, cannot reflect the metamorphosis towards “digital capitalism” that requires a broader forms of participation. In other words, the world of work has transformed much faster than its legal framework. However, employees and their interest representations, especially works councils, can act as supporters of innovation processes at company level (Pfeiffer, 2014).

The politically decisive question is whether the BetrVG, in its present form, can still cover the frameworks of work, the company and the employer that have been fundamentally changed by digitalization processes, i.e. spatially and organizationally delimited (in particular, at crowd work, from a legal point of view Franzen, 2019). One could argue that a substantial expansion is needed in several respects (for specific proposals Wedde & Spoo, 2015; Oerder, 2016). In the medium term, its fundamental revision should be on the political agenda (for a differing assessment Schneider, Stettes, & Vogel, 2019).

There are two interrelated problems of the BetrVG:

32 See for details the project “Works council work based on ‘autonomous software systems’ (BABSSY) <http://www.blog-zukunft-der-arbeit.de/tag/babssy/> (own translation).

33 Hanau & Matiaske (2019) constitutes an exception. An exclusive adjustment by means of the labor courts is insufficient, since it can only refer to individual cases.

- The extension of information, participation and control rights, taking into account so far less important areas, such as employee data protection in order to prevent “algorithmic discrimination“, should be one part of the political agenda. The other should be the opening up for at present excluded groups, such as work and service contractors, solo self-employed, and above all crowd workers. All in all, the obsolete concept of employee should be extended by means of legal measures.
- The existing rights of information and consultation should be extended towards “Co-determination 4.0”. In the case of personnel planning issues, the right of consultation could be extended to a right of co-determination, and in the case of problems of company-specific continued vocational training, an original right of initiative of works councils should be introduced in place of the response to proposals from the employer. In addition, extended rights for works councilors to be released from their regular work would provide more personal resources.

However, even such fundamental revisions of the BetrVG would not solve all existing problems. The coverage rates at company level (Ellguth & Kohaut, 2018), which have been declining for years, would not automatically increase; the validity of the act in the legal sense does not automatically lead to any de facto implementation of its rules and imperatives. Furthermore, it has to be taken into regard that the long term ongoing processes of decentralization of employment relations from the sectoral to the company level leads to additional work for works councils

## 5.2 The Sectoral Level

The difficulties of negotiating compromises are evident because of the contrary positions of the corporate actors.<sup>34</sup> Their divergent interests are illustrated by the example of the umbrella associations (BDA, 2015; DGB, 2017).<sup>35</sup> A comparative study states: “The German social partners (BDA and DGB) share common concerns about the digital transformation but differ on the approach to labor market measures, namely on the need to regulate the online platform economy and other new forms of employment.” (Eurofound, 2016, p. 2–3)

The DGB vehemently calls for specifically “hard” regulation, whereas the BDA<sup>36</sup> prefers no or at most “soft” regulation of the digitized economy. The BDA categorically rejects basic changes and considers the existing regulatory framework to be sufficient – also for solo self-employed and crowd workers – and warns against any additional decrees. “Here, the Internet is conceived of as a distinct yet seemingly intangible space that does not map cleanly on to existing regulatory regimes. Consequently, the placelessness of crowdworking becomes a justification for the absence of intervention. However, while the spatial organization of crowdwork does raise complicated jurisdictional issues when it comes to rights, regulation and enforcement ..., we must be wary that BDA’s claims of incompatibility be-

34 Zanker (2017) outlines the example of a collective agreement “Mobile Work“.

35 Greef & Schroeder (2017) and Greef, Schroeder, & Sperling (2020) provide broad overviews of the positions of the federations. The positions of political parties describe Askitas, Eichhorst, Fahrenholtz, Meys, & Ody (2018).

36 Similar positions as the BDA at national level are supported by BusinessEurope (2018) at supranational level.

tween law and crowdwork are well aligned with longstanding neoliberal efforts to roll back regulation generally.” (Johnson, 2020, p. 29)

Instead, the BDA has repeatedly called for the existing working time law to be de-regulated, i.e. for further “flexibility” in working hours, especially of rest periods and maximum daily working hours; maximum working hours should no longer be set daily, but only weekly (“working time 4.0”). In addition, certain employment forms, in particular agency work as well as fixed-term contracts should be made “more flexible” (BDA, 2017). – The exact timing of potential regulatory requirements would also constitute a controversial issue: the BDA argues that early intervention would hinder the necessary “flexibility“, whereas the DGB fears that once negative effects have occurred, they are difficult to reverse.

In comparative perspective, the corporate actors are on opposing tracks: “Trade unions drive the public debate on platform work due to their concerns about working and employment conditions; for the most part, they ask for clarifications and regulation. Governments are less vocal; for the time being, and with some exceptions, they are monitoring developments and considering what stance to take. Employer organizations have at least involvement in public debate and have mixed perspectives; on the one hand, they appreciate this flexible employment form for its potential contribution to innovation and competitiveness; on the other hand, they express concerns regarding unfair competition.” (Eurofound, 2018a, p. 41)

Necessary changes cannot exclusively be introduced by the state by legal regulation, but also initiated and implemented by the collective partners themselves (Benner, 2015; Greef & Schroeder, 2017). Private governance can complement – or even partially replace – government regulation. Necessary but currently impossible is the conclusion of collective agreements for the sector-specific blueprint of the framework conditions of digital production technologies, e.g. on training and further training/qualification, introduction of IT systems as well as social plan arrangements for the protection of particularly affected groups. The measures actually taken, such as the establishment of internet forums, are far from “classic” forms of interest representation.

Lobbying is the political form of interest representation that is not directed at the employer, but at the state as the third corporate actor VofER. In the context of digitalization its importance is increasing because collective bargaining, the other variant of the enforcement of interests, has not yet taken place – and continues to fail as a form of regulation. Therefore, a changed form of the division of tasks becomes necessary.

The trade unions make five main demands for the political regulation of crowd work: setting minimum requirements, clarification of status, codetermination, social security and data protection (Greef & Schroeder, 2017, p. 31).<sup>37</sup> In the case of the solo self-employed, one of the requirements is the extension of insurance compulsory, i.e. their obligatory inclusion in the (statutory) pension system. In the case of continuing vocational training, a federal law on continuing education should be considered in order to establish a uniform framework (in addition to regulatory problems Keller & Seifert, 2020). A resolution of the upper house of the German Parliament argues as follows: “The ... concept of employee must be adapted to the realities of the company in such a way as to allow the interests of all

37 Problem hardly dealt with in the current discourse on digitalization are developments in gender issues (for “gendered effects” Howcroft & Rubery, 2018).

employees of a company to be represented in a uniform manner, irrespective of whether that person is in a regular or an employee-like position similar with this company.” (Federal Council, 2016, p. 1) Platform operators have little interest in this change. Therefore, initiatives of the state are necessary and constitute the only viable alternative. “... there is a need for regulation with regard to power and information asymmetries in the algorithmic management of platforms. This includes securing rights for platform workers to have a say in determining rules on the platforms (e.g., with regard to the terms of trade, performance control, or the design of ranking systems)” (Krzywdzinski & Gerber, 2020, p. 28).

The existing legal framework is closely aligned with the normal employment relationship that constitutes the point of departure and reference. Its adaptation to changed circumstances and extension is the preferred political alternative, especially in consideration of the described weakness of interest representation at company and sectoral level. This does not mean the (unrealistic) revival of full-time work for all employees but, among others in our context, the guarantee of efficient interest representation at company and sectoral level as well as the encompassing provision of opportunities for further training and retraining and the integration of additional groups of employees into the pension system (Keller & Seifert, 2020).

However, the enforceability of these claims remains highly uncertain. So far, legislative initiatives are hardly on the political agenda. Government activities hardly get beyond reports of official commissions and non-binding declarations of intent (BMAS, 2017). Political majorities for substantial changes – and external support for ER through granting further “rights” – hardly exist. The otherwise frequently given interaction effect or the complementary relationship between legal and contractual rules is – at least so far – not present in the context of digitalization.

A protracted problem is the legal and factual status of platform workers. “... at least two different obstruction strategies can be witnessed on the part of the platform operators: the first strategy uses fixed-term contracts to obstruct the emergence of works councils, while the second leverages freelance contracts to the same end.” (Askitas, Eichhorst, Fahrenholtz, Meys, & Ody, 2018, p. 25) The retention of all market, especially employment risks including all social insurance contributions with the “independent contractors” creates new zones of uncertainty for them and a monopoly of power on the part of platform operators. Anyhow, existing information imbalances and power asymmetries are amplified by platforms (Heiland, 2019).

Existing verdicts on individual cases, various attempts to define lists of legal criteria do not solve the general problem. Present suggestions include the introduction of a minimum fee per individual task, like the minimum wage for employees, the introduction of so far excluded groups into the general obligatory pension system and, as far as ER in a narrow sense are concerned, their inclusion in the scope of the BetrVG and the already mentioned opening of union membership for additional groups.

All partial suggestions face problems of implementation. Therefore, a broader solution should be introduced, an extension of the present status of employees to additional groups. A recent example of regulation is a controversially discussed, finally passed law in California in 2019. It changes the status of “freelancers” or “independent contractors” of ride-hailing services such as Uber and Lyft, as well as food delivery services such as DoorDash

to employees with the corresponding individual and collective rights. Thereby it massively interferes with the predominant business models, enforces their changes and prevents the “uberization” of their employment conditions (Birnbaum, 2019; Hawkins, 2019; NY Times, 2019). Other US states announce that they want to follow suit. These examples indicate that the regulation of the growing “gig economy” can be enforced despite considerable resistance from the platform operators.<sup>38</sup>

Our normative suggestions refer to the company as well as the sectoral level of the platform economy. We ask how working conditions could be established that are comparable to those in systems of dual ER. Unions should strengthen their policy at company level and offer more and specific services, such as training opportunities, for works councils. From the political point of view the BetrVG, that was established in the early 1970s, needs major reforms or even a fundamental revision in order to substantially expand the rights of works councils in planning and implementing processes of digital transformation. At sectoral level both federations, DGB and BDA, are on opposing tracks; collective bargaining that leads to binding results does not take place. Initiatives by the state to expand the existing legal framework to atypical forms as well as new forms of employment, especially platform workers and/or “independent contractors”, are necessary. All in all, the platform economy should not constitute a deviant case of ER. “An ongoing controversy, for example, is whether temporary and contingent employees are legally considered employees ... it is sufficient to define an employee as anyone who sells their labor. Executive, managerial, and supervisory employees might also have roles as agents of their employers, but when they sell their labor, conceptually they are employees.” (Budd & Bhawe, 2009, p. 52)

## 6 Outlook

In times of high growth and efficiency potentials, the bargaining power of the employees and their interest organizations decreases (further) at both, the company and the sectoral level beyond the already existing level. With increasingly digitally shaped labor markets, due to the changed requirements of qualification structures and requirements, these developments may not only lead to more pronounced tendencies of segmentation, but even to polarization into a stable core and a more flexible peripheral workforce (for Germany Arnold, Arntz, Gregory, Steffes, & Zierahn, 2016, international comparative Degryse, 2016; Neufeind, 2018). Old inequalities are being exacerbated and new ones are emerging, for example in differences between low-skilled and knowledge-based service work (“digital Taylorism” versus “digital Bohème” in digital slang). For two or three decades the prominence of the formerly formative standard employment relationship has been declining, and various atypical forms of employment have been increasing, among others marginal employment or mini-jobs, fixed-term or temporary employment, and agency work (for details in comparative perspective Kalleberg, 2018). In the foreseeable future changed forms, such as solo self-employment, or even new forms, such as cloud work and gig work, will grow and gain in importance. They constitute not only new atypical but also new precarious

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38 Cf. for the regulation of Uber in nationally different legal-institutional contexts Thelen (2018).

forms of employment in terms of earnings dispersion and the incidence of low pay (Gerber & Krzywdzinski 2019; Krzywdzinski & Gerber 2020).

The socio-economic consequences of such “digital divides” even extend far beyond employment conditions and labor markets and in the short term beyond traditional topics, especially wages. In the long term they will extend, because of their impact on social security systems especially existing pension systems, far into the social structure and the society of “digital capitalism” (Keller & Seifert, 2020). In macro perspectives, the declining bargaining powers of interest organizations and overall coverage rates, which will continue to fall as a result of digitalization measures, contribute to increasing new inequalities. In the present discourse, the long-term consequences and dangers of digital transformation do not receive sufficient account.

Last but not least, in theoretical terms characteristic “varieties of capitalism” exist (Hall & Soskice, 2001). Germany has frequently been ordered as the prototypical example of a coordinated in contrast to liberal market economies. More recently, this categorization has been criticized (for others Doellgast, 2012). In view of the ongoing digital transformation in growing (service) sectors it needs to be substantially revised.<sup>39</sup> Major parts of the platform economy, as well as SMEs, crafts and private service sectors, neither have trade unions and viable employers’ associations nor sectoral collective agreements and works councils. Therefore dual ER with corporate actors as well as corresponding procedural and substantive rules, one of the features of coordinated market economies, do not exist. These changes lead to further similarities with systems of “monistic” ER, which are characteristics of liberal market economies, as they dominate in the Anglo-Saxon countries (Colvin & Darbishire, 2013). It remains to be seen if these trends towards convergence in a neoliberal direction will continue ...

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39 Other typologies that distinguish national systems (Eurofound, 2018d) also run into difficulties. Similarities of sectors are often more pronounced than those of countries (Bechter, Brandl, & Meardi, 2012).



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