

ZENTRUM FÜR SOZIALE INNOVATION

CENTRE FOR SOCIAL INNOVATION

Shaping industrial relations in a digitalising services industry: the Nordic case

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1 Introduction

1.1 The project in general

The UNI Europa project "Shaping Industrial Relations in a Digitalising Services Industry - Challenges and Opportunities for Social Partners", in cooperation with "ZSI — Zentrum für Soziale Innovation" and promoted by the European Commission, aims to identify and analyse change factors and explore new approaches for social partners on the challenges of maintaining effective industrial relations systems in a digitalising services industry. The project strives to provide policy advice for trade unions, social partners and policymakers on necessary adaptations of institutional frameworks for industrial relations, collective bargaining, social dialogue and capacity building for social partners. Challenges and opportunities are identified and analysed in particular with regard to workers' representation at company level and collective bargaining as well as the work and organisation of trade unions in general.

Across the project, we are dividing the investigation into three aspects of services that are clearly interrelated.

- Under the heading of "Service markets" we look at changes in service production and delivery
 through digitalisation (for example, online services and self-service) and also on the impact of
 these changes on customers and society at large. It is one of the dimensions where rapid changes,
 disruptive innovations (for example platforms) need to be addressed. Here, we also address the
 status of services in "industrial" or economic policy in the context of your respective sector and
 country.
- "Service labour markets" addresses the development of service jobs, their quality and quantity.
 We focus on jobs with intermediate skill levels, and will also address atypical and precarious
 employment (including self-employment) in your sector/country, the development of skills and
 re-skilling and policies of addressing them.
- "Company strategies and work organisation" looks at the company level and your union's
 information and experience with companies in your sector/country: We will address
 transnationalisation of service companies at large, outsourcing and offshoring, working
 conditions and ways of influencing them, interest representation and participation.

These aspects are pursued in three workshops involving trade unionists, researchers and representatives of international organisations from October 2017 to January 2018. Results of research and workshops will be integrated in two reflection workshops in 2018.

2 Service Markets in the Nordic countries

2.1 The context: services in the Nordic countries

When we talk about the Nordic countries, we typically refer to Denmark, Sweden, Norway, Finland and Iceland. However, Greenland and the Faroe Islands are also included due to their relations with Denmark as well as the Åland Islands due to their relations with Finland.

The service sector plays an increasing role on the Nordic labour markets – although with some nuances. The general trend is that employment growth takes place in the tertiary sector. For instance, more than 80 percent of employed Danes are working in the service sector – 50 percent in private services and 30 percent in public services – and employment in the service sector has grown with 57.000 persons since the Global Financial Crisis in 2008 (Ilsøe and Madsen 2017a). However, manufacturing, the secondary sector still plays a significant role in a number of Nordic countries - among others Sweden - and the primary sector still plays an important role in for instance Norway.

How are wages and working conditions regulated in the Nordic countries? In general, collective bargaining plays a dominant role for regulation of wages and working conditions. The Nordic models of labour market regulation are so-called 'voluntaristic' industrial relation models, where employers' organisations and labour unions negotiate collective agreements within each sector and industry (Andersen et al. 2014). Most sectors are covered by sector-level agreements, which allow local-level bargaining to varying degrees in certain countries and sectors – for instance in Danish industry. Legislation plays a limited role for labour market regulation in the Nordic countries. However, variation can still be observed. For instance, Norway has introduced an extension of collective agreement by law to certain areas of the economy, whereas social partners in Denmark strongly oppose any legislative interference in wage setting mechanisms (Dølvik 2016).

The Nordic welfare states are important contexts for the voluntarist models of labour market regulation. Universal access to social assistance, education and further training shape overall developments on the labour market. Tripartite co-operation and negotiations between the state, employers' organizations and labour unions are therefore an important element of the Nordic models of labour market regulation (Andersen et al. 2014). The unemployment insurance system is central to this cooperation – unions administer unemployment benefits and the state provides funding in addition to the contributions paid by members of the unemployment insurance. The unemployment insurance system is characterized as a 'Ghent system'. These systems deliver a so-called Ghent effect – union densities are often higher in countries with Ghent systems than in countries without Ghent systems. However, change in legislation over the last decades in certain Nordic countries like Denmark and Sweden have affected the Ghent systems and this seems to have had a negative effect on overall union densities (Kjellberg and Ibsen 2016). In general we see slight decreases in union densities even in the Nordic countries. Nevertheless, union densities in the Nordics are still at a comparatively high level compared to the rest of Europe and the Western world (see Figure 1).

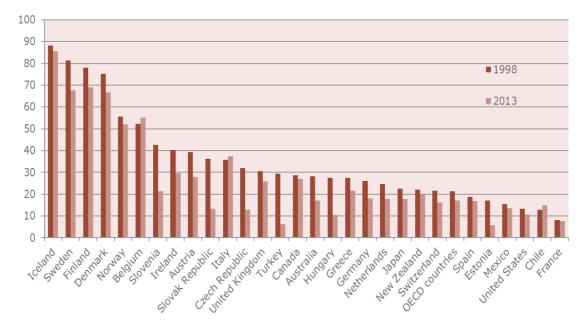


Figure 1. Source: OECD statistics.

The Nordic countries all score very highly on international indexes of ICT access and use – Denmark, Iceland, Sweden, Norway and Finland are all among the top 10 of the UN ICT Development Index and

Denmark, Sweden, Norway and Finland are in the top ten of the Digital Readiness Index (ITU 2014; Economist Intelligence Unit 2010). The first index tells us about the ICT access in the Nordics, whereas the second tell us about the usage. Most citizens and companies in the Nordics have bought items online, communicated digitally with the public sector and paid bills online. Public investment in digital solutions is high in the Nordic welfare states, and this has acted as an additional driver of digitalization. The high level of digital readiness presents a huge potential for the development of digital businesses and jobs in the Nordics, but also a potential for change: the companies and citizens are ready to digital solutions including smart services and knowledge-intensive business services (KIBS) as highlighted in Finland (Toivonen 2015). We will now dig deeper into three large service industries in the Nordics, which have experienced – and are expected to experience - further and rapid change due to digitalization. They are not representative for all service industries, but they illustrate three significant developments within the service sector that might affect other industries.

2.2 Policy debates on digitalization and social partner responses

The digitalization of work and labour markets has been in the center of attention in both public and private debates in the Nordic countries. The consequences of the 4th industrial revolution – digital automatization – have been debated with a special focus on the future of manufacturing in the Nordics, whereas the consequences of digital platforms have been strongly debated with regard to the future of private services. One could argue that the first part of the debate has not fully matured, as digital automation will also affect private services – perhaps even more - and this part of the discussion needs to be further developed.

There have been several analyses of digital platforms, their effect on Nordic service labour markets and possible regulatory reponses. The Norwegian government created a Sharing Economy Committee in 2016, which published their final report in 2017 (The Sharing Economy Committee 2017). The Swedish union Unionen, which organizes a large share of service workers in Sweden, has published a report with suggestions especially on the regulation of the sharing economy in a way that sustains the voluntarist model of labour market regulation (Söderqvist 2016; Söderqvist 2017). The Danish and Norwegian confederations of trade unions have published policy papers on the sharing economy (LO Denmark 2016; LO Norway 2016) as well, and The Nordic council of ministers funded a pilot project comparing developments across all five Nordic countries (Dølvik and Jensnes 2017). Finally, the Finnish government has developed a vision and a strategy programme for Finland 2025, which includes a strong focus on creating a fertile business environment for digital growth (Finnish Government 2015).

However, if we focus on social partner responses more broadly, we find significant differences between the Nordics. In one analysis comparing social partner responses to digitalization (digital automatization and digital platforms) in private services, it becomes clear that especially the tripartite responses have differed – for instance between Denmark and Sweden (Ilsøe 2017a). This is a challenge, as currently platforms and platform workers remain unorganized and are therefore not covered by the bipartite negotiations typical of the voluntaristic industrial relations models of the Nordics. This means that in the case of self-employed and service providers with unclear status as employees or employers, other arenas than the bipartite negotiations of collective agreements are needed to kick off a social dialogue (Ilsøe 2017b).

Sweden has concluded more than eight tripartite commissions on topics related to digital labour markets. This includes the Digitalization Commission (2013) and the Taxi Commission (2015) (see Table 1). In Denmark, there were no tripartite commissions with broad representation of social partners on the topic of digital labour markets before 2017 (see Table 2). Only in 2017, the Danish government established a

Disruption Council that will work throughout 2017 and 2018 (Regeringen 2017). Also in 2017, tripartite negotiations on the future of further training in Denmark as well as of the unemployment benefit system were conducted and resulted in agreements. In sum, tripartite initiatives on digitalization of work came much later in Denmark than in Sweden. In Norway, we also have more and earlier tripartite initiatives than in Denmark (Dølvik and Jensnes 2017). This delay in the introduction of tripartite committees on digitalization of work in Denmark may help explain why social partners in Denmark have less common language on the topic and more contradictory viewpoints than their colleagues in Sweden for instance. Further commissions in Denmark could lead to the development of more common language among the social partners, as it will force them to discuss this topic and adequate ways to include it into the collective bargaining system.

Table 1: Social partner reponses in Sweden to digitalization of work in the private service sector.

Sweden	Union	Employers´ organisation
Unilateral arena	 Analyses/reports, media appearance Dialogue with departments and political parties Dialogue with European and international unions Responses to EU strategies Website on automatization Attempt to build a private unemployment office for white collar workers (through a cartel of white collar unions) 	 Analyses/reports, media appearance Think tank which deals with the issues of education in a digital context Dialogue with departments and political parties Dialogue with European forums and employers organisations
Tripartite arena	 Digitalization commission (2013) Taxi commission (2015) Workplace safety in the new economy (2015) five more commissions since 2015 Many new tripartite initiatives in the making on platforms, life-long learning and social security 	Commission on future work (Arbetet i framtiden)
Bipartite arena	Informal contacts to employers organisationsContact new digital employers	Informal contacts to unions

Source: Ilsøe 2017

Table 2: Social partner reponses in Denmark to digitalization of work in the private service sector

Denmark	Union	Employers´ organisation
Unilateral arena	 Analyses/reports, media appearance Political project Dialogue with government departments and political parties Responses to EU strategies Pension schemes for selfemployed union members; freelancer network Dialogue with European and international unions 	 Analyses/reports, media appearance Political project Dialogue with government departments and political parties Dialogue with European forums and employers' organisations
Tripartite arena	 Roundtable at Copenhagen municipality Government-led strategy process on sharing economy Union-led conference on platform economy Union-led expert panel on platform economy 2017 Government-led disruption panel 2017-18 	 Roundtable at Copenhagen municipality Company forum Debate at Denmark's Political Festival Tripartite agreement on unemployment benefits Tripartite agreement on further training
Bipartite arena	Informal contacts to employers ' organisationsContact new digital employers	Informal contacts to unions

Source: Ilsøe 2017

2.3 Specific service sectors

2.3.1 Retail

Retail is one of the largest service industries in the world and also in the Nordics if measuring by number of employed people (Dølvik 2001, Bosch and Lehndorff 2005). It is an industry with both skilled and unskilled workers, although the number of un-skilled workers has increased in recent years. We find a large number of students working in retail in the Nordics – and this share has increased – as they are interested in working marginal part-time and unsocial hours, which is the dominant working time pattern in the industry (Price et al. 2011; Ilsøe and Felbo-Kolding 2014; Ilsøe 2016). This is different to other European countries where part-time work of women with childcare responsibilities covers the sector's need for flexibility in line with the varying gender regimes of each country (Jany-Catrice & Lehndorff, 2005) (Grugulis and Bozkurt 2011). Many retail chains are owned by either Nordic or foreign-owned capital funds. E-commerce is playing an increasing role within retail, which means that global companies can take over market shares from national companies. However, Nordic retailers increasingly have e-commmerce in their business models as well – especially directed towards the Nordic markets (Ilsøe and Felbo-Kolding 2014). This is expected to have a negative effect on the number of jobs in retail and also to change the competence requirements. Working in e-commerce some of the most important tasks are communication skills (also in writing), marketing and foreign languages. Fewer people are needed in sales and more work is shifted to storage and logistics (ibid.). However, many Nordic retailers choose to combine physical shops with webshops - both among speciality shops and groceries. Accordingly, e-commerce does not appear to only replace physical shops but is also used to provide a more varied customer experience in interaction with physical shops. In recent years, a number of Nordic retailers have introduced self-scanners where the customers scan and pay on their own, when they leave the shop. For instance, this is the case in Swedish-owned IKEA and in Dansk Supermarked. The effect of this extension of self-service on employment has not been evaluated in larger studies yet, but the automation of cashiers' work is expected to have a negative effect on the overall employment in the industry.

2.3.2 Banking

Banking is one of the larger service industries in the Nordics – a number of Nordic banks operates in several European countries and are in fact transnational companies. Good examples of this are Nordea, SEB and Danske Bank. However, the traditional business model in banking is under pressure due to digitalization. Money becomes more digital and less physical, transactions becomes more mobile (Mobilepay via smartphones in Denmark is one example) and we slowly see signs that the traditional functions of banks in lending and saving are becoming more network-based via crowdfunding sites although this is still in the making. This and the low-interest environment after the Global economic Crisis puts pressure on employment levels in banking and on the traditional business models of larger and smaller banks with physical headquarters, branches and interactive customer service. One Nordic union, Finansforbundet in Denmark, has taken a proactive initiative to handle developments together with the banking association Finance Denmark and the City of Copenhagen. They are running a Copenhagen Fintech Lab, which offers office space for 100 fintech entrepreneurs at the union headquarters, which allows them to interact and communicate with the frontrunners in future banking (https://www.finansforbundet.dk/da/nyheder-aktuelt/Sider/Fuldfartpaacopenhagenfintech.aspx). This has made the union reflect on the future role of unions within banking at the upcoming yearly union congress. If future employment in banking increasingly includes self-employed entrepreneurs and fewer traditional wage earners hired in larger companies, this may require unions to adapt. One vision would be the development of professional networks for the self-employed, where it is possible to share ideas competences, and where unions act as facilitators of such (https://www.finansforbundet.dk/da/OmFinansforbundet/Sider/voresfaellesskabskaludviklestilforandri ngerne.aspx).

2.3.3 Cleaning

Cleaning is a very price-sensitive industry with many workers working part-time, marginal part-time or doing multiple jobs to make a living — also in the Nordics (Ilsøe et al. 2017). It is often un-skilled work, and we find an overrepresentation of women and migrant workers in cleaning in the Nordics (ibid.). Cleaning in companies and public institutions has undergone many organizational changes in recent years due to outsourcing from the public to the private sector, subcontracting models in the private sector and companies that behave in conflict with the law (Rasmussen et al. 2016). However, from 2016 and onwards we can also observe significant changes in cleaning in private households in the Nordics. This has for many years been a grey or even black market, where for instance migrants make some extra money outside the regular labour market. Nordic startup digital platforms grabbed this as a business opportunity; by mediating private household cleaning via digital labour platforms this market could potentially become more efficient and white. In Norway, the platform Weclean has had great success and growth, and the owners are considering whether to transform the business model from subcontracting to a regular company with employees (Dølvik and Jensnes 2017). In Denmark, we can observe several cleaning platforms. Happy Helper is the largest, and it has just received 3.5 million DKK from Vækstfonden to

expand their business from the large cities in Denmark to the rest of the country. We also find the platforms Cleady, Meploy and Hilfr offering cleaning in private households. Most of these Danish platforms (like the Norwegian example) stipulate a minimum hourly wage. One of them, Hilfr, also adds a 'welfare supplement' to the hourly price. Some of them also add insurance to the price that covers accidents at work. This insurance is created in collaboration with the insurance company Tryg (Hilfr and Happy Helper). Interestingly, the Danish platforms set an upper limit for the yearly income via the platform at 50.000 DKK. This limit is no coincidence – if you earn less than 50.000 DKK as a self-employed worker in Denmark you do not need to register with a VAT number and pay VAT. The cleaning platforms are growing rapidly and have a potential to change the somewhat unregulated segment of private household cleaning. They are typical gig platforms mediating work in a very local market – customers and cleaners often live near each other - which also reflected in the fact that they often use the national language (not English) on their homepages and apps. It is not possible yet to estimate whether the selfemployed cleaners pay taxes, but if some of the platforms start cooperating with the tax authorities or develop into regular companies, this could transform private household cleaning into a regular formal labour market that can integrate periphery workers (migrants, exchange students, unemployed) in new ways into the labour market.

2.4 Platforms

In general, digitalization accelerates economic activities through digital platforms (Hill, 2015; Huws, 2014). Foreign platforms like Airbnb (rental of housing) and Upwork (work at the computer) as well as Nordic platforms like Weclean in Norway (cleaning in private homes) and Worksome in Denmark (academic work) have made it significantly easier and accessible to all to earn an extra income by offering services online. It is important to distinguish between two different types of platforms; 1) capital platforms that mediate rentals like Airbnb and 2) labour platforms that mediate the buying and selling of private services like Upwork (Farrell and Greig, 2016). Capital platforms are, in principle, not part of the labour market. There may, however, be grey zones. If a person who rents out an apartment on Airbnb starts to offer additional services (tour guiding or breakfast cooking) or rents out several apartments, it can be considered a selfemployed activity. Labour platforms are part of the labour market, and the main business model is subcontracting, i.e. those working via the platforms are considered to be self-employed. It is important to distinguish between crowd work platforms for immaterial work that is conducted online - like the American platform Upwork - and gig platforms - like Norwegian Weclean - that distribute small tasks performed in the physical world (De Stefano, 2016). The first type addresses a potential global labour market, where the buyer and seller of the service can be situated in widely different countries and time zones. The other type typically addresses a local labour market, where the buyer and seller often find themselves in the same city or maybe even district to keep time spent on transport down.

Analyses of bank data from JP Morgan Chase from 2016 indicate that the digital platforms contribution to the economy is still relatively modest in the United States. About 1 percent of American adults have received revenue from a digital platform (Farrell and Greig, 2016) in a given month. A number of European surveys indicate that up to 10-15 percent of the European population earn money through digital platforms. In the series of surveys commissioned by UNI Europa and FEPS in 2017 the exact figure for Sweden is 12 % (Huws & Joyce, 2016; Huws et al., 2017). However, in these studies, a very wide definition of digital platforms has been used. The European surveys find that earnings through platforms are limited.

http://finans.dk/erhverv/ECE9671098/happy-helper-faar-millionlaan-af-vaekstfonden/?ctxref=ext

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Currently most platform workers supplement other incomes. Danish surveys confirms the tendency observed in the US – the use of the digital platforms are still limited (Statistics Denmark 2017). 1 per cent of Danes have earned money via a labour platform during the last year, whereas 1,5 per cent have earned money via capital platform. Most have earned less than € 3300 per year before taxes (Ilsøe and Madsen 2017b).

3 Digitalization of work and the development in service labour markets

Digitization of the labor market and its consequences have been debated for many years in media, politics and research, but the discussion has intensified in Europe since the 2010s. The European Commission has launched various digital agendas as part of the Internal Market Strategy (European Commission, 2014, 2016). At the same time, a number of books and reports have pointed out that digitization today accelerates job losses and changes job functions – especially in the service industries.

Among others, the literature highlights two large trends. First and foremost, digitalization accelerates what you could call the automation of work (Ford, 2015). Automation is a process we know right back from the first industrial revolution. There have been a number of calculations estimating what consequences automation will have in terms of job loss (Frey and Osborne 2013) and loss of job functions (Chui et al. 2015, 2016) in the US - especially within service jobs like sales, office and administrative support. In the European sphere, more recent research makes estimates where job-loss and losses of job functions are combined. They have located a number of high-risk jobs – i.e. jobs where many job functions will disappear (Arntz et al. 2016). The distribution of high-risk jobs vary among the Nordics but in this study are at the comparative lower end – from 10 percent in Norway to 9 percent in Denmark, 7 percent in Sweden and 6 percent in Finland (ibid.). Many of these estimates have been criticized. First and foremost, the estimates do not include the creation of new jobs or functions due to digitalization, and secondly, estimates looking 10-20 years into the future (for natural reasons) cannot include the effect of future technologies not invented yet.

If an overall change in the structure of the labour market leads from a job economy to a gig economy this will bring more independent workers into the labour market. Some of these are likely to work full time as self-employed, whereas others can be expected to continue combining regular jobs with gigs on the side. Three innovative policy responses in the Nordic sphere to this development could form a basis for discussion in others countries: 1. The new agreement on unemployment benefits in Denmark, 2. The new pension schemes in the Danish pension funds PFA and PKA and 3. The basic income experiment in Finland.

3.1 The new agreement on unemployment benefits in Denmark

After the latest reform of unemployment benefits in Denmark, it soon became clear for the Danish social partners that the question of self-employment— and those self-employed that combine freelance work with regular jobs or unemployment benefits— remains a challenge to the existing system. Therefore a group was formed to work on an adjustment. They reached an agreement just before summer 2017 (to be confirmed in parliament later), which allows all members of the Danish unemployment insurance system to report their income as either a wage from a job or a fee from independent work - according to their own judgement. The members decide the status of their income themselves (Beskæftigelsesministeriet 2017). This means that any source of income now counts, when members seek to earn the right to another period of unemployment benefits (which is two years in Denmark). By handing the decision on the work status to workers themselves, this agreement may be able to overcome the long list of challenges that arise, when gig work is registered by the public authorities in relation to social assistance, student allowances and many other social rights in the Nordic welfare states. Currently, welfare systems are still designed to deal with either standard employment or the full-time self-employed

– they are not used to deal with the grey zones and mixed arrangements that are likely to become more common in the future.

3.2 The new pension schemes in the Danish pension funds PFA and PKA

The Danish pension funds PFA and PKA have introduced pension schemes for those employed that are members of a trade union but NOT covered by a collective agreement. This is especially relevant for the self-employed. PFA is a private pension fund, the largest in Denmark, and cooperates with many Danish trade unions on labour market pensions. A number of these unions, including the Financial Services Union in Denmark (Finansforbundet) and The Union of Commercial and Clerical Employees in Denmark (HK), which organizes retail workers and administrative workers, have created a new pension scheme for their members via PFA called MedlemsPlus (https://pfa.dk/medlemsplus/). This scheme has many similar qualities as the labour market pension for workers covered by the collective agreement (insurances, low admin costs) and is an overall better option compared to private pensions. It allows union members without collective agreements to get access to an attractive pension scheme – and it allows the unions to retain and perhaps also recruit union members that combine wage earner jobs with self-employment or who shift between jobs and independent work during their career. Recently, PKA, a member-owned large pension fund for employees in the public sector, launched a similar initiative called PKA-Privat (https://www.pka.dk/pkaprivat/). It will be interesting to follow the effects of these two pension schemes on union densities – can such pension schemes be a driver of organization among the self-employed in the Nordic countries? As the Nordic models of labour market regulation are voluntarist models, such an effect could be important for the sustainability of the Nordic models.

3.3 The basic income experiment in Finland

In Finland, the government have approved and funded an experiment with partial basic income - €560 per month, tax free (Kanga 2016). The background for this experiment is the relatively higher level of unemployment in Finland compared to the rest of the Nordic countries, and the experienced effects if the 4th industrial revolution with loss of job functions/jobs due to automatization. The goal is to evaluate whether a basic income could help to simplify the social security system (less bureaucracy and less spending on bureaucracy) and whether it creates stronger work incentives than existing benefits that render self-employment and mixed income sources difficult. The experiment runs through 2017 and 2018. In 2017 it includes a random sample of 2000 Finns between ages 25 and 58 who are paid unemployment benefits. In 2018 originally the plan was to expand the target group to include other persons with small incomes and young persons under the age of 25. A large control group is included to estimate effects of the partial basic income on economic activity. It will be interesting to follow the evaluation of the experiment. Can partial basic income – also in the Nordic context of relatively high wage levels and high living costs – be a sustainable solution to fewer employment opportunities? Or will it – as some expect – have a negative effect on the overall wage levels and act as an indirect public support of marginal parttime jobs in low-wage services like retail, hotels and restaurants and cleaning (Kanga 2016; Ilsøe et al. 2017: O'Sullivan et al. 2017)?.

4 Digitalization and company strategies and work organization

In the Nordics, there has been a long tradition of employee participation at workplace level, team organization and job design. This was initiated in the secondary sector – especially manufacturing industries – but has also spread to the tertiary sector including call centers, cleaning and banking (Wiegman et al. 2010; Ravn et al. 2012; Nordic Financial Unions 2016). Digitalization offers challenges and potentials to the Nordic tradition of work organization at the workplace level and beyond. Automation of work shifts the focus from cooperation between employees to cooperation between human and

machine/computer. Some Nordic researchers argue that the quality of the cooperation between employees and computers/computer-based machines will be decisive for the future creation of jobs, growth and well-being at work (Shapiro and Hougaard 2016). The use of computers and devices also increases the possibilities of telework – work from home or other places than the workplace. This has also been on the agenda in some Nordic organizations as telework potentially can dissolve the workplace and relationships between colleagues (Larsen and Andersen).

Teleworkers often work sometimes from home and sometimes at the office. More radically, the new labour platforms offer the buying and selling of tasks, where workers may not meet at all (Dølvik and Jensnes 2017). Crowdwork platforms like US-owned Upwork or Danish-owned Worksome are in most cases mediating work that can be done anywhere in the world (in the physical sense). To which extent crowdworkers are performing their tasks at offices where they meet other crowdworkers we do not know yet. While co-working spaces for freelancers have been developing in recent years, the supplementary function of much crowd work makes this less likely. Co-working can be expected to be most relevant for those crowd workers who perform specialized and skilled tasks where sharing of experiences and networks are important - like for instance start-up or the Fintech entrepreneurs who have joined the Fintech Lab in Copenhagen mentioned earlier, or classic freelancers in media or the creative industries. Gig work platforms like US-owned Uber or Norwegian-Owned Weclean often engage a local market, as you buy and sell small tasks performed in the physical world (like transportation and cleaning). Workers do not have to meet, as they often work individually already. However, we find examples of gig workers on food delivery platforms who meet up at waiting spots or similar, which allow unions to mobilize these workers (Tassinari and Maccarrone 2017).

Some researchers are highly skeptical of the very individual work organization on both the crowdwork and gig work labour platforms (Berg 2016). One of the sources of learning and empowerment that increase productivity and growth has been the close collaboration between workers in the workplace, the social capital and the physical co-presence which allows knowledge sharing and also building of joint interests and identities on a daily basis. The Nordic tradition of employee participation and team work at workplace level has contributed to a high score on most of these parameters in many Nordic workplaces. If platform work increases in certain industries, this could lead to an erosion of this Nordic tradition and contribute to lower productivity gains than seen before. Often the financial risk of the buyer on a platform is low (it is a onetime transaction), which leaves little incentive to reorganize work to improve productivity (Berg 2016). Work is also inefficient in the way that workers spend a lot of time findings tasks – time that is unpaid. Furthermore, workers experience communication with the buyers as poor, which increase the risk of low quality or wrongdoings (ibid.).

However, we must bear in mind that some of the platforms centralize and register service work that hitherto has been dispersed in grey or black markets and been comparatively isolated before (cleaning in private households is one example): In those cases, platform-based work may allow more knowledge and awareness about other workers and perhaps interaction than before.

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