

Dynamics of Work Relationship Status in the Era of Industrial Revolution Disruption 4.0¹

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Abstrak

Perkembangan teknologi dan ilmu pengetahuan telah mendorong lahirnya industri yang cukup pesat. Industri yang lahir tersebut berbasis internet atau dikenal dengan industri 4.0. Lahirnya industri 4.0 berakibat pada disrupsi di sektor ketenagakerjaan mulai dari sisi produksi hingga sisi perubahan status hubungan kerja dan keberlangsungan pekerjaan. Lahirnya industri 4.0 semakin memperkuat posisi kapitalisme di dalam ekonomi global. Menyoal bagaimana dinamika disrupsi di era industri 4.0 terhadap sektor ketenagakerjaan khususnya status hubungan kerja akan diulas dalam artikel ini. Status hubungan kerja sangat penting untuk dikaji karena berkaitan dengan jaminan sosial dan upah yang didapatkan serta keberlangsungan kerja. Data dalam artikel ini didapatkan melalui hasil dari laporan penelitian, jurnal, buku, dokumen serta dari sumber internet. Data diperoleh menggunakan metode studi pustaka dan di analisis dengan eksploratif. Dari hasil analisis didapatkan bahwa dampak adanya industri 4.0 berpengaruh pada disrupsi status hubungan kerja, dari status hubungan kerja yang tetap, kontrak dan outsourcing menjadi status hubungan pekerja lepas (freelance) dan precariat (serabutan). Dampak yang lebih luas terhadap hak-hak normative buruh berupa ketidakjelasan upah, jaminan sosial yang didapatkan dan keberlangsungan karir pekerja. Oleh karena itu, diperlukan arah kebijakan untuk melindungi dan meningkatkan kemampuan pekerja dalam menghadapi Industri 4.0. Dengan demikian, diharapkan pekerja memiliki keterampilan dan daya tawar dengan pihak industri.

Abstract

The development of technology and science has encouraged the birth of a fairly rapidly growing industry; the Internet-based industry, also known as Industry 4.0. The birth of Industry 4.0 resulted in disruption in the labor sector from the production side due to changes in the status of employment relations and job security. It increasingly emphasizes capitalism in the global economy. This article will question the dynamics of the disruption in the Industry 4.0 era on the labor sector, especially in the status of employment relations. The status of employment relations is very important to be studied because it is related to social security and wages earned and job security. The data in the article are obtained from the results of research reports, journals, books, documents, and from internet sources. The data were obtained using a literature study and exploratory analysis. Analysis results showed that Industry 4.0 caused a disruption in the status of working relations, from the status of a permanent employment relations based on contract and outsourcing, to the status of freelance and precariat (odd jobs) relations. The broader impacts on the normative rights of workers were in the form of unclear wage systems, lack of social security and lack of career sustainability of workers. Therefore, a policy direction is needed to protect and improve workers' abilities in facing Industry 4.0. Thus, it is hoped that workers will have the skills and bargaining power vis-a-vis the industry

Keywords: labor, industry 4.0 revolution, work relations status

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INTRODUCTION

Changes in the labor sector are occurring more rapidly due to the influence of technological changes and the penetration of the developed world (North) to poor countries (South). At present, penetration due to technological changes has a considerable influence on the sustainability of the industry. Industries were previously based on production, and settled on a location; now there is a shift to industries that are no longer settled in one place and moving to other countries. Hadiz argues that globalization is a process of internationalization of production between countries (Hadiz 2000). Changes in the location of production are getting easier with the Industry 4.0 revolution. The basis for Industry 4.0 is not fixated on the distance between the location of production and the market. Industry 4.0 relies on digitization, which breaks down the boundaries of time and location, and minimizes costs and human resources in the process of implementing work (Fuchs 2014).

The presence of Industry 4.0 is intertwined with the spirit of capitalism, striving to be in all lines of life with economic control. Thus, it can be explained that the presence of Industry 4.0 is a platform for capitalism. As such, it causes a shift in employment relations and a wider labor market flexibility. The flexibility of the workforce is characterized by the boundaries of the employment relations that are becoming less rigid, or more flexible, including the uncertainty of the status of the employment relations, which affects the wages received by workers (Benner 2009). The workforce in the Industry 4.0 era is getting intensely flexible, because in addition to a competitive market, the presence of technology further reduces time and place boundaries, as well as direct contact between individuals.

The phenomenon of changes in the status of employment relations is caused by the internationalization of the labor market to generate profits by reducing production costs and labor expenses. Therefore, the presence of technology 4.0 results in changes in employment. Not only implications to the wages received, this change is also related to other normative rights such as working hours, overtime, and social security. The sociological aspect of the phenomenon can be seen in the changes in the factors of production, the individuals involved, and the rights and obligations. Therefore, the Industry 4.0 phenomenon is highly interesting to study, especially regarding changes in employment relations and labor market conditions. There is a change in how the industrial sector

absorbs workers, besides, new skills are needed by workers to be able to compete in the job market compared to before Industry 4.0. Competition among workers will increase and the new job markets will be opened especially for emerging types of work.

Several previous studies have touched this issue. The first study examined technological developments and the transition of industrial status, conducted by the Lean Lab at Graz University of Technology (Karre et al. 2017). This study sought to examine in a case study applying selected measures of effectiveness as well as their benefits and integration with related activities in business and academia. The study was part of an ongoing effort to review the TU Graz LeanLab classification based on morphology to study manufacturing industries. It then summarized the upcoming challenges in manufacturing in the context of Industry 4.0 and creates an implementation roadmap for specific cases in digital work management.

The second research discussed the status of workers, particularly on the legal experience of workers in Turkey. Aydın (2021) discussed people's experiences in the legal system and explained the relations between law and society. This article described the understanding of labor law and working life in Turkey from a worker's perspective, to uncover the legality of worker experience and awareness of work, which comprised of career path, predictability, and visibility. The expectations of workers towards the legal system are reflections of the work life towards the legal system.

The third research was conducted by Myriam Ertz and Emilie Boily, regarding the rise of the digital economy (Ertz & Boily 2019). The study drew on the impact of blockchain technology on collaborative economy (CE). Blockchain technology was developed through digital currency as a market practice and form of consumption that allowed digital platform users to negotiate directly with each other and integrate blockchain technologies, such as Facebook and the cryptocurrency Libra. Further, the fourth study was conducted by Brown (2017), discussing coworking, coworking space (CWS), media, and practices related to coworking. The wide variety of forms and variations in critical urban contexts of change challenged traditional concepts of the workplace and creative workplace. Meanwhile, creative workers were associated to the same space and place. CWS facilitated how colleagues can positively support workers and how colleagues related to the greater space as a solution to an increasingly atomized work patterns.

The fifth study, conducted by Simanjuntak (2016) discussed the employment relations status of home-based workers (industrial outworkers) according to labor law. This study stated that the rights and obligations of home-based workers, most of whom were women, were highly dependent in their employment relations with the employer. They tended to have very low salaries, as the work agreement between the employer and the home-based worker was generally unwritten.

The sixth study discussed the status of employment relations by Robertson & Kee (2017) describing social media at work, job satisfaction, job status, and the use of Facebook with colleagues. This article stated that workplace satisfaction is found in the context of computer use and social media. Employee satisfaction at work was found to positively correlate with the amount of time they spent on Facebook with coworkers. Meanwhile, part-time employees spent the longest time on Facebook with their co-workers, and contract employees showed the highest level of job satisfaction (Robertson & Kee 2017).

The seventh study conducted by Kirkness and Ren (2014) described the status of employment relations. The article predicted the rate of change of work status due to health among women living in in The Osteoarthritis Initiative (OAI). This article showed that the rate was an independent predictor used by the work environment to identify workers who are at high risk of losing their job due to health. Further, the eighth study related to employment status was conducted by Jiyun Duan et al. (2021), observing the relations of the types of employment relations with the strength of employment status, in the background of rising temporary employment in China. Employees' need for status regarding the practice of permanent and temporary employment relations was viewed from a moderating effect. This article found significant differences in the level of enthusiasm of workers with temporary employment relations for the need of higher relations status.

Based on the literature review above, the studies mentioned above can be classified into two groups, the first discussing how Industry 4.0 had changed the type of work and employment status. The second was about the lack of provisions in labor laws regarding precariat workers as an impact of digital work. Previous research had neglected to discuss how the changes in Industry 4.0 caused impacts on the job market. In addition, previous literature did not explain how to increase the capacity for workers to enter the labor market chain. Therefore, the author's

paper intends to explain capacity. Building for workers in increasing their entry into the labor market, especially in Indonesia.

RESEARCH METHOD

The data for this study were obtained from research reports, journals, books, documents, and sources from the internet related to the status of employment relations. This research used the qualitative method and a literature review approach with exploratory analysis. The author analyzed with reflection and interpretation of the dynamics of the status of the employment relations in the era of industrial disruption. Data sources related to the dynamics of work relation status in this article were obtained from books, international and national research journal articles from the 1984-2021 period.

This article discusses the impact of the dynamics of the status of the employment relations in the era of industry 4.0 revolution disruption. The results of the research can be used as a reference and provide insight into the dynamics of the status of the employment relations. Also, it can be used as material for consideration for stakeholders involved in making policies on labor normative rights in employment. This article also discusses how employment changes due to industry 4.0 in employment relations, and a map of Indonesian workforce opportunities in the digital era. This opportunity map can be used as a reference for how to manage competitive Indonesian human resources so that they can open up new types of work in the digital era. Then the data obtained about the opportunities for Indonesian workers will be further analyzed on how the government should respond to changes in employment due to Industry 4.0.

THEORETICAL FRAMEWORK

Currently, the discussion about the industrial revolution is increasing with the invention of the internet as the initial milestone of the industrial revolution 4.0 and the digitization of machines in various industries. The invention of the internet was an initial milestone that changed the way of production and communication. In industrial revolution 4.0, the need for data plays an important role because they can be used as accurate information to determine the direction of the management of a company (Lupton 2015:21). Lupton further explained that the need for workers who understand interpreting data analysis is very much needed,

and there is a shortage of such resources. This is of course different from the original industrial revolution.

In the previous phase, industrial revolution began with the invention of the steam engine. Then the second industrial revolution with the invention of aircraft and electricity, then the third industrial revolution with nuclear power (Sentryo 2017). Therefore Industrial Revolution 4.0 is marked by the lack of fixation about the distance between the production and the market locations. Industry 4.0 relies on digitization, which breaks down the boundaries of time, location and minimizes costs and human resources in the process of implementing work (Fuchs 2014:6). The main basis for products is data as processed commodities that can be sold or used to produce services.

Changes in the industrial 4.0 production base, which do not recognize the time and place, certainly bring about changes in production patterns and employment relations that affect worker independence. On the other hand, however, other workers do not have a clear bargaining position. Also, the main problem is the regulations regarding the status of new employment relations. The increasing precariousness of freelancers due to the development of digital platforms (Woodcock & Graham 2020:21). Further, Woodcock and Graham explain the development of technology as a tool to provide new types of work in the form of connecting workers with consumers (Ofreneo 2013). Technological developments are increasing freelance work. On the other hand, the decline in 'standard work', has developed globally (Hsiao et al. 2015) Furthermore, Hewison mentions job changes in the form of increasing 'precarious and vulnerable jobs among workers (Hsiao et al. 2015). This is due to changes in rights and obligations of workers due to changes in employment relation status.

It has become commonplace to show that the development of technology that is faster than the existing regulations is a crisis of the industrial era which correlates with the development of technology. Quoting Giddens (1990:17), "In various fields of modern institutions, the risk does not only appear as a danger caused by the operation of imperfect disembedding mechanisms but also as a "closed", institutionalized arena of action". This is due to development capital, whose institutional regulations are always lagging. This phenomenon certainly causes the community, especially workers and employers, to lack reference in resolving employee relations problems.

The development of information that does not keep up with technological developments results in the safety and comfort of regulatory workers being threatened. Some risks are described by Giddens, quoted in Standing that “the era of globalization is a set of informal norms that are in tension with industrial time norms which are still pervasive in social analysis, legislation, and policymaking” (Standing 2011:116). The lack of responsiveness of the government to this change in employment will affect the pattern of employment relations and the normative rights received by workers. Also, globalization always influences laws and norms, and policymaking. Because if the policy does not follow the development of changes in employment, the condition will create lack of harmony in the industrial relations between employers and workers. In this condition, the role of the state is needed so that the employment relations do not harm either party. Although technological developments are faster than regulations, that should not be a reason to reduce the government’s role in protecting workers and providing investment certainty for corporations.

DISRUPTED DYNAMICS OF WORKFORCE DUE TO DIGITALIZATION

The development of the internet-based industry gave birth to Industry 4.0, which caused changes in human interaction and social dynamics within. This can be found in industries such as online transportation platforms in Indonesia such as *Gojek*, *Grab*, *Maxim*, etc. Also, it penetrates the realm of online buying and selling such as the online shopping platforms *Shopee*, *Tokopedia*, *Blibli.com*, etc. The presence of Industry 4.0 in addition to opening job opportunities, on the other hand, has also eliminated several types of jobs. McKinsey & Company Southeast Asia Associate Partner, describes the types of jobs that will disappear by automation, namely types of jobs that require repetition in the process. These jobs include data entry, payroll clerk, production worker, and machine operator, especially with the invention of the internet as a production base.

The loss and replacement of 23 million jobs due to automation does not mean that there are no new types of jobs. If the type of work that is repetitive is vulnerable to being replaced, then 27 million to 46 million new jobs will emerge and it is predicted that it will shift towards the service sector, for example in health services. Therefore, we need

a labor framework in dealing with this situation, for example from a policy perspective. There is a need for a framework that resolves the issue of new jobs and workers based on the status of the employment relation. This insecurity in work status is consistent with the Benner's (2009) assertion. Many workers, their supporters, and policy analysts, understandably, challenge the drive for flexibility, as it clearly shows that it results in insecurity, lower wages, and worse working conditions to the majority of the workforce. The condition of the new work relation is vulnerable, because the workforce can only belatedly respond to the changes, eroding the career development of the worker.

The development of internet-based industry 4.0 requires expertise or understanding of mastery of technology and becomes the basic capital in winning a competition. If individuals are not able to master, adopt and apply technology quickly and to participate in the competition, they would be marginalized in the labor market. Burrow, Sharan & Byhovskaya (2016:9), in their study explained that "technology alone cannot pull marginalized workers out of poverty or provide them with access to high-quality segments of the labor market". This is a lesson not to let this technological development create a disaster in the labor sector (Burrow, Sharan & Byhovskaya 2016:9). The change in industry 4.0 is in line with the goals of capitalism, which desires multiplication of profit and capital, citing Durkheim (1984:291) that efficiency and productivity are at the core of the division of labor. Therefore, the first important point is human resources (labor) as the frontline in seizing this job market opportunity. The need to learn new skills when Indonesians want to gain productivity benefits (Mc Kinsey and Company 2019). By having skills, the workforce will have a bargaining position with the company. In addition, workers will have more opportunities to choose jobs and careers according to their skills. Lack of skills mean that workers will only receive lower wages from the company.

WORKERS AND CAREER PATHS

The changing status of employment relations as part of the development of industry 4.0 with digital platforms is becoming a new form of colonization, carried out by controlling human life in the employment aspect. Therefore, the industrial revolution 4.0 requires state intervention in terms of developing internet connectivity between regions. Thus, differences in internet access can be minimized so as to reduce job access

gaps (opportunities) to work. The government in this case has launched the Palapa Ring, which is expected to be able to answer the challenges of internet access capacity problems.

Industry 4.0 forces workers to change in their struggle. Workers should not keep distant from the development of industry 4.0, they need to increase their own capacity in response. If they fail to increase their capacity, then with the current flexible market, new types of jobs can be filled by workers from abroad. Especially, the labor market in Indonesia is sided with the entrepreneurs, having the flexibility in carrying out Termination of Employment. This can be seen from data from the Ministry of Manpower (Lokadata 2020), stating that the number of layoffs (PHK) in Indonesia in 2018 reached 3,400 workers, rising in 2019 to 45,000. This figure jumped to 3.6 million as of August 2020, as the impact of the COVID-19 pandemic that has occurred since the beginning of 2020.

Apart from layoffs, future working conditions will also expand precariat and freelance employment relationships, where precariat workers and freelancers do not have certainties in career, social security, and wages. Career certainty will allow employees to have targets and hopes for the future, such as retirement planning targets and participation in retirement funds. This issue is very important to study because it relates to the ability of workers when they are old and unable to work. Also, a predictable and clear career path should at least reduce the psychological burden of workers regarding their future well-being.

Regarding the insecurity of the workforce in pursuing a career, it cannot be denied that the impact of the transformation of capitalism on the status of the employment relations is rooted in the status of the outsourced employment relations. In practice, the outsourcing system creates a third party in the employment relations between workers and the company, namely contractor companies or labor service providers (Triyono 2011). This is the fundamental cause of the vulnerability of workers to receive their right in the form of a more decent living wage. This does not stop at the dynamics of the status of the outsourcing employment relationship: the expansion of the status of precariat and freelance relationships as a capitalist market in the era of the industrial revolution 4.0.

Changes in the status of the employment relations will result in changes to the rights to be received, for example, the right of workers to continue to receive their basic salary along with the benefits and social

security. The results of research by Asiati et al. (2019:71) in the Bandung City manufacturing industry showed that status changes could occur, even termination of employment could occur in various modes (Asiati, et al. 2019). Further, one of the methods of doing so is by placing workers in another field or a new type of work that they have never done before.

The description of the conditions of employment status and the rights received is not much different from what happens in other countries, for example in China. The results of a study conducted by Fuchs (2014:98) on the working conditions at Foxconn documented low wages, unpaid work, no rest, long working hours, work environment harmful to physical and psychological health, and overtime work.

CHANGES OF EMPLOYMENT RELATIONSHIP STATUS

Employment relations in the Industry 4.0 era are increasingly flexible and lead to outsourcing, and even a new relationship status in the form of 'partnership'. This change in the status of the employment relations clearly threatens the sustainability of workers. For some people, employment status reflects recognition and respect for a worker in the management structure. However, there has been a change in relationship status between respondents and a growing perception that relationship status is no longer a marker of social status.

Changes in employment relations status of workers in the Industry 4.0 era also have an impact on the wage and social security schemes received (Asiati et al. 2019:71), even though the Manpower Law no. 13 of 2003 only recognizes the status of contract, permanent, and outsourced employment relations. The phenomenon of changes in the status of employment relations needs to be monitored so as not to cause turmoil in society, even though this change in the status of the employment relations is the impact of technological developments.

The digital platform as a medium that changes the status of employment relations has now entered the public sphere. The development of the autonomous industry in completing work and the location of the workplace are the main attractions. However, the weakness in this work is mainly related to the internet connection. Internet connection is the main basis of production factors and allows workers to work anytime and anywhere. This flexibility is attractive to workers. However, its effect in the form of job security was not considered further. Workers are

too optimistic that industry 4.0 will bring positive impacts, because new jobs will emerge. However, the mechanism for anticipating changes in normative rights is not that simple, as job changes will further reduce workers' rights. Then what types of employment relations emerge with Industry 4.0 and how workers' rights change will be analyzed further below.

PRECARIAT

Changes in the production process are a given because of the industrial revolution, where the production process is getting faster and more efficient as well as changing the composition of the work. The effect of the industrial revolution is an increase in production efficiency due to the use of digital technology and automation, as well as changes in the composition of work on all sides (Sutikno 2018:pp). Therefore, technological changes that have an impact on reducing the composition of work need to be monitored, and a solution found. Due to these technological changes, not only in labor-intensive and manufacturing industries but also in all industries affected by the digitalization of this technology. The composition of the work includes the type of work, wages, and employment status.

One type of relationship status is precariat. Precariat is an employment relations that does not have an employment agreement during the working period in terms of working hours. In other words, this can be termed as "odd jobs". Therefore, the precariat does not have a permanent job because it is only based on job offers based on offers for a period of time, and employment is not guaranteed. Furthermore, the amount of wages earned is uncertain. However, the trend for workers with precariat status is the increasing number of technological developments that give rise to new types of work that can be carried out by cross-border workers without having to be bound by a written contract with a company.

The precariat has a new status of employment relations which is vulnerable to the job risks created by the market. Vulnerability with the emergence of precariat employment status which is part of the new exploitation is in line with Standing's statement about the increase in the flexibility of the labor market, which is then interpreted as an agenda to transfer risks and insecurity to workers and their families (Standing 2011:1). Instead of prioritizing flexibility in the status of the employment relations, it closes the class consciousness of the precariat. Aspects

of wage transparency, social security, and career maturity are difficult to achieve by workers with precariat employment status. The flexibility of work brings the precariat deeper into the circle of capitalist exploitation without class consciousness. Projections of the precariat employment relations in the future will increase, because with precariat employment relations, a company will profit by reducing production costs. In this case, workers have the advantage of flexibility in terms of space and time. The work does not need to be done in an office or a certain place, but can be done anywhere as long as there is an internet network connection.

The results of the work are sent via the internet, and the work is assessed via email, for example. On the other hand, this is indeed beneficial for workers, for example reducing the time wasted going to the office and saving on transportation costs. This happens in various kinds of work such as web development. Changes in the flexibility of the workforce means that there has been a risk transformation from the company to the workers. The risk transformation of the company is left to the workers. In this condition, workers have a weak bargaining position or are subordinated to the company. On the other hand, workers are required to be more competitive and produce maximum work. The company in this case has the authority to select workers who have good performance and low wages without the need to retrain workers.

FREELANCE WORKERS

The status of freelance/casual employment relations developed because of company efficiency measures to minimize wages and the company's obligation to pay severance pay as well as social security for workers. These workers have personal responsibility for the risks and wages that depend on individual productivity. Freelance work is currently growing in the era of digital technology that is booming and desirable. Kalleberg believes that technological advances force companies to become more globally competitive and enable them to provide greater opportunities for outsourcing work (Kalleberg 2013). The impetus for corporate competition, which provides opportunities to strengthen the existence of outsourcing, does not escape the status of freelancers in the labor market .

Furthermore, the status of the employment relations for casual workers provides a new source of exploitation in the form of labor efficiency.

But on the other hand the totality, professionalism of freelancers who are used at certain times becomes an attraction for freelancers. In an article, Tirto.id (2017) explained that current job seekers in Indonesia come from the 18-24 year age category (58.02%) where freelance and part-time jobs are included in the top five most sought after jobs. This shows that there are many job seekers. In addition, the high number of freelancers indicates that current job seekers do not want to be bound by permanent employment relations. From the company's perspective, this improves their bargaining position, as there is more demand for jobs compared to the supply. Moreover, Tirto noted that workers aged 18-24 years have vulnerabilities in terms of work protection, especially as they have just entered the labor market. This supports attractive employment for companies seeking high productivity of workers at low wages. This is due to the lack of experience, usually resulting in a lower compensation than those with more experience. On the other hand, what is of concern is how they get normative rights such as social security. This is because they are often contracted in the short term. Seeing this problem requires awareness of workers and the government, that workers must not become too comfortable with the condition of this casual employment relations and ultimately leading to unemployment if the contract has expired and workers do not have the anticipation to look for other alternative jobs.

The condition of freelancers above is also explained by Cohen, as part of a company's strategy such as in the field of media journalism such as the inequality of the position of freelancers with low wages, facing high pressure without a raise, lack of social protection, and exploitative employment contracts (Cohen et al. 2017). Lack of career path encompassed by casual employment status is still desired by those who are unemployed. This casual relationship status will increase when the labor market demand is low while the labor supply is high. This results in lower wages and diminished normative rights.

The status of the work trap is also a motivation in this freelance work. Having an employed status improves one's social position in the eyes of society. On the other hand, employment allows one, for example, to access loans. Looking at this condition, it seems that there is no other option. In the future, conditions like this will give rise much learning about employment risks.

OPPORTUNITIES FOR INDONESIAN WORKERS IN THE DIGITAL ERA

The competition for the job market in Indonesia in the digital era is becoming tougher. The reason is that the majority of workers have intermediate school education, or lower, which is 58 percent of the workforce (BPS 2020). With such a condition, serious efforts are needed to increase the capacity of human resources. On the global scene, according to data from the World Economic Forum (Schwab 2019:16). Indonesia's economic competitiveness ranking in 2019 was ranked 50, compared to Thailand (40), and Malaysia (27). Furthermore, at the World Economic Forum (WEF), Indonesia is only regarded because of its large market and large market share, with a large macroeconomy because of its large population. Yet, the business system sector is still far from Malaysia and Thailand. The thing to watch out for is not to let Indonesia only become a market.

Looking at the map of labor competitiveness, efficiency and competitiveness are the keys to victory in the era of globalization. This led to various oppression of workers. Especially in the digital era, changes in employment relations are increasingly fluid without work agreements (PKB) (Triyono 2020). There is an increase in employment agreements in the form of 'partnership' and contracts for casual and odd jobs (precariat). Therefore, workers who are about to be employed and workers who are already in the labor market must be ready to be upgraded and replaced if they are unable to provide benefits and have low competitiveness. This competitive nature is instilled in this era of globalization. Thus, humans have lost their basic nature as humans who have a sense of help.

Competition for international labor competitiveness is facilitated by the World Economic Forum (WEF). Globalization through market penetration has changed the constellation of labor in countries with weak economic foundations. Countries with strong economic foundations will continue to exploit weak countries. Globalization only benefits countries that are ready to compete, have superior skills and capital. This competitiveness requires workers to produce goods in a time efficient manner, and in accordance with company targets. This competitiveness results in workers not having the autonomy to manage related skills capacity. Skill capacity is determined by the market, yet, in achieving this ability, one must have sufficient capital to achieve it,

because the increase in capacity is related to the capital owned. For prospective workers who do not have sufficient capital, it will be difficult to enter the labor market. Therefore, globalization is an ambitious project to marginalize marginalized persons. So it is very difficult for the marginalized to experience class mobility. As a result, the marginal class remains in a cycle of poverty because it does not enter into the capitalist production chain that promises large salaries.

Indonesia's competitiveness, especially in terms of productivity and wages based on WEF data, is ranked 28th, while Malaysia is ranked 6th, while Vietnam is ranked 56th. However, this is not the main factor in expanding investment, because there are other factors, such as regulations that are on the side of corporations and labor laws that are not in favor of trade unions. Seeing the problems above, it is necessary to have a policy from the government on how to increase the capacity of the workforce and in providing protection to workers. On the other hand, the government also provides regulations that support the existence of Industry 4.0 which is expected to open up wide employment opportunities. But on the other hand, there is also a need for a regulatory scheme from the negative impacts due to changes in industry 4.0. The scheme that can be applied is how education is currently able to synergize with the needs of the labor market.

Meanwhile, from the description above, the industrial sector is growing very rapidly due to the penetration of technology such as the internet and automation, where competition in the international market demands efficiency and new technologies, in addition to strengthening the supply of labor and regulations in the industrial sector. The government must also strengthen other sectors to support this industry, such as in the agricultural sector, because the agricultural sector is expected to be a contributor to several industrial materials. Therefore, an industry that can survive is an industry that can collaborate with other sectors.

On the other hand companies must be able to adapt to the times. Ariyanti (2017) reported that companies that survive are companies that change their digital strategy. Therefore, to increase competitiveness, companies must respond to changes that occur in the global market, one of which is responding to the Industry 4.0 revolution. Thus, it is hoped that the industrial sector can become the mainstay of expanding job opportunities. Also, it is necessary to protect workers regarding the normative rights of workers that must be received from the company (Ariyanti 2017). On the other hand, workers must be able to adapt to

the industry 4.0 situation. Widhyharto (2019:172) noted that workers adapt by following the skills required by the job market. The intersection of industry 4.0 workers must change in terms of struggle lines. At the intersection of Industry 4.0, workers need to change in their line of struggle. Workers need to not only fight to demand their rights, but they also need to fight the struggle of improving their skills and capacities. If this capacity increase cannot be implemented, then with the presence of Industry 4.0 which disrupts the labor market, new types of work can be filled by workers from abroad. The labor market filled with workers from outside will create unemployment. If this happens, it will not be able to contribute to the Indonesian economy (Widhyharto 2019:172).

Strengthening human resources to possess high quality and technological literacy is an absolute prerequisite to win the competition in this digital era (Triyono 2020). Mastery of technology will result in preparedness of the Indonesian labor force for competition. Technological developments will impoverish and marginalize individuals who do not understand the mastery of technology in the labor market. Just Job Network in its study explains that “Technology alone cannot pull marginalized workers out of poverty or give them access to high-quality segments of the labor market” (Network 2016). This is a lesson not to let this technological development become a disaster in the workforce sector.

Capacity building of skills to adapt to market needs evidence through internationally recognized certifications. This certification is an acknowledgment and part of the capitalist way of working. It aims to get a skilled workforce. The division of labor is an efficiency effort and its current form is in the form of this certification. Therefore, the first important point is that the human resources is at the forefront of seizing this labor market opportunity. New skills need to be learned if Indonesians are to benefit from productivity (Mckinsey and Company 2019).

Finally, in order that workers are able to benefit from Industry 4.0 opportunities, infrastructure readiness must not be neglected. This is in the form of reach and connection speed of the internet throughout the country, so that no area is left behind in utilizing the existence of the internet. Another form of infrastructure readiness is that the education sector must improve itself and update with the latest technology, to follow the developments of the employment sector.

CONCLUSION

Technological developments resulted in the rise of industry 4.0 as one of the pillars of global change that has an impact on changes in the employment sector. These changes need to be addressed wisely, so that concerns about negative impacts such as changes in employment status that result in reduced rights both in terms of wages and social security can be mitigated. If this cannot be overcome, it will cause social problems. The increasing status of precarious workers has resulted in increased vulnerability to workers' rights, because workers do not have an employment relations that is clearly bound by a contract in the employment relations agreement. The increasing precariousness will further increase the exploitation of labor because there is no protection for workers, especially in terms of wages and job security.

Working conditions through changes in the status of the employment relations further silence the normative rights of workers. The formation of capitalist exploitation is accompanied by the absence of class consciousness, and the injustice caused by changes in the status of freelancers and precariats, that only bring superficial work comfort. The era of digital exploitation through a new employment relations status creates unlimited work under the pretext of flexibility that actually eats away the unlimited energy, mind, and time of workers. In such a condition, job comfort, worker security, job worth, and career certainty remain a utopia in the industry platform.

Thus, the government can provide normative labor rights such as wages and career continuity as an appropriate and balanced solution. Further, the government must have a clear road map in preparing human resources in order to win the competition at the global level. Responsive policies by providing training and curriculum that are in accordance with technological advances will provide capital for workers in global competition. In providing these skills, it is necessary to look at the structure of the workforce from the capacity of human resources, the types of skills needed by the industrial world, the educational curriculum, and the needs of human resources in the industrial world. By having skills that are demanded by the labor market, Indonesian workers will have a strong bargaining position. In addition, the existing opportunities can be captured by Indonesian workers. Thus, Indonesian workers should achieve the skills available in the market to obtain wages and other normative rights.

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