INDUSTRIAL RELATIONS IN THE DIGITAL SHARING ECONOMY: 
A Critical Review of Labor Informalization and Social Partnership Relations

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Abstract

This study provides a critical analysis of digital transformation which not only creates new patterns in production, distribution, and consumption but also has implications for power. Various issues have yet to be responded to thoroughly by policymakers to have allowed the new labor relations created in the digital sharing economy to develop quickly and become fragile, especially for laborers. In this article used a qualitative method with the desk study approach, by collecting data and information through examinations, analyzing information data using secondary data. This data is in the form of books, journals, workforce data from BPS (Statistics Indonesia), supporting data from related institutions, laws and regulations related to work, reports and literature studies. The results of this study show the emergence of an online transportation based digital platform which has opened new job opportunities, on the other hand, the industrial relation formed are only based on “virtual agreement”. The social partnership relations that exist between business/industry players and workers also give rise to new anomalies. This relation obscures the rights and protection of laborers who are unknowingly experiencing exploitation. Digital platform businesses cover the practice of labor exploitation within the rhetorical frame of freedom, flexibility, and partnership. It is the company that is at the peak of power, with control over technology, capital, and access. This study provides input to stakeholders, both government and digital industry, that digital developments should be able to be utilized in influencing social transformation that builds industrial optimism, technology, and empowers society more broadly. State authority and private power need to be integrated to act and be socially responsible. New findings in this study are on aspects digital-based industries cannot be separated from the process of commercialization and the massification of modern capitalism. Lack of regulations that become safety nets makes the labor’s position vulnerable and prone to being exploited. The industrial relation of social partnerships, and the absence of regulations governing the work of the informal sector, especially on the digital online transportation platform, creating new anomalies and problems for the labor.

Keywords: industrial relations; labor; informalization; digital; social partnership
INTRODUCTION

The development of the digital economy is currently experiencing rapid progress. Almost all business sectors are required to follow the digital trends that are currently developing, including through the medium of networking and sophisticated devices. The development of digitalization in the economic sector has made it easier for community activities, but also raises new risks that have an impact on changes in the employment sector. Digitalization has given birth to innovations that demand global economic competition to become more widespread and freer, yet further cause digital disruption between laborers who can access technology and those who are not.

Don Tapscott (1996), an observer of the development of information and communication technology in the United States, in his book entitled The Digital Economy, Promise and Peril in the Age of Networked Intelligence, states that the development of the world economy is undergoing a change from the dynamics of industrial society based on steel, vehicles, and roads in the direction of the dynamics of the new economic community formed by computers and networks. The production, consumption, and distribution cycle are increasingly being experienced and owned by a new global community system supported by the strength of economic expansion, a global information system network, and supported by technology. Moreover, this causes that the community must begin to open themselves to the development and dynamics of new media in the digital age.

Digitalization has transformed systems in many manufacturing industries into robotic systems, which also have the effect of reducing human labor. Although there is still an existence of business actors using conventional methods, it can be projected that it will change the character of work in the future. This has caused many businesses to choose to reduce the human workforce by being replaced by digital and robotic technology. Of course, this rational choice was taken to cut capital and increase profits.
Digital-based industries cannot be separated from the process of commercialization and the massification of modern capitalism. Business and industry players who currently still use conventional methods are systematically forced to transform into industries that prioritize digital technology. Business actors who can manage the transformation well can relatively withstand the development and disruption. Conversely, if that cannot be done, the company is threatened with bankruptcy. The impact, the conventional industry is still able to survive but could make efficiency, which results in the termination of employment.

On the other hand, digitalization has also opened new employment opportunities in many sectors, especially in the informal sector, for example, e-commerce, online-based transportation, and network-based Micro, Small, and Medium Enterprises (MSMEs). The informal sector is a new alternative for labors affected by digital disruption. This is what makes labor risk in Indonesia, where previously, many worked in the formal and manufacturing sectors. After the transfer of technology, those who are less capable of accessing technology are displaced from the formal sector. According to data from the Central Statistics Agency (BPS), job creation in formal economic activities during 2012-2014 is an average of 1 million people per year. In 2015-2017, job creation fell by an average of 0.47 million people per year. In the informal economy activities during 2011-2014, there was an average of 1 million increase in labor per year. In 2015-2017, the number of labors increased by an average of 2 million per year.

This shows that the development of the digital economy has also given rise to the informalization of work. This definition of informalization refers to the growth of income creation activities outside the formal institutional dimension. Informal labors are involved in the production supply chain for established industries. On the other hand, the development of informal sectors, such as small and medium businesses, is a way to continue to absorb labor. During this time, job formalization is seen as a rescue mechanism to overcome the failure of the formal sector to absorb labor, which can be a solution to overcome unemployment.

However, this phenomenon is almost without regulatory regulations, especially in the industrial relations formed. The clarity of industrial relations is something crucial, related to the rights and responsibilities between the two parties. Lack of regulations that become safety nets makes the driver’s position vulnerable and prone to being exploited. The focus of this study, the industrial relation of social partnerships, and the absence of regulations governing the work of the informal sector, especially on the digital online transportation platform, creating new anomalies and problems for the labor.

**LITERATURE REVIEW: DIGITAL TRANSFORMATION IN EMPLOYMENT**

The theory of digital development hitherto puts digital inequality, disparity, and access as infrastructure problems. In this paradigm of digital development, the issue of digital transformation is only understood in technological determinism. However, we need to look at comparisons with digital relations theory based on the paradigm of “digital structure” which looks at the digital economy created in the information society critically. Then in this critical paradigm, the problem lies precisely in the alienation created through technological determinism. The new wave has transformed society at large, manipulating perceptions and thoughts and dictating needs (Prasetyo, 2017).

Profound transformation, as conveyed by Briggs (2002), not only creates new patterns in production, distribution and consumption but also has implications for power. In this case, the social structure of society, as emphasized by Prasetyo above, can change along with changes in assets and capital that move flexibly and rapidly in the information society. The government, especially in developing countries like Indonesia, even experienced stuttering in seeing digital developments in the world. Generally, not responsive to developments that occur, such as not having clear regulations
in regulating digital developments, the shock of the manufacturing industry is also not responded clearly.

Various issues that the Indonesian government has not responded to thoroughly, including extensive social changes regarding assets, capital, and power. Alienation and unclear rules in the position as technocrats, as if they had led the new relations created in the digital economy rapidly become extremely fragile for the information society and especially for the labors (Jepsen and Drahokoupil, 2017).

This problem was also expressed by Verdegem (2017), which shows how the industrial 4.0 revolution created many digital platforms. It was explained that the creation of a digital platform gave birth to a form of exploitation of a new style which he called the “cyber proletariat” which questioned the utopian places of the internet’s existence. Verdegem shows how the technological revolution has led to the growing polarization between precarious workers and the wealthy elite and shows how inseparable class power is linked to computerization. More specifically, global information technology systems and profitability analysis are based on human exploitation, both in making digital devices and in the practice of digital labor.

In line with that, Van Den Broek (2010) also sees this digital economy as a unique and contemporary relationship that creates the exploitation of a new style was called “netslave”. Digital workers, such as labors in the informal sector, are formed by unclear employment contracts, work processes, and wage bargaining. Nevertheless, workers in this sector do not have strong bargaining positions. The position of the workforce becomes inferior and tends to be exploited systemically. Therefore, the type of work carried out does not change the nature of capital accumulation or labor status as a commodity (although contested).

**METHODODOLOGY**

This article employed a qualitative method with the Desk Study approach, by collecting data and information through examinations, analyzing information data using secondary data. This data is in the form of books, journals, workforce data from BPS (Statistics Indonesia), supporting data from related institutions, laws and regulations related to work, reports and literature studies. Then the data is interpreted into the focus of research and analyzed with the theoretical framework used.

**RESULTS AND DISCUSSION**

**Labor Informalization and Lack of Regulation**

Job informalization is not new but has long been practiced in the labor economy. This informalization comes with a form of partnership between business/industry and labor. The type of social partnership relation in the digital economy era is no different from the work that has been developed before. The partners of the providers of digital technology companies implement targets and tasks that must be agreed. Yet, this model does not have an industrial relations pattern, as stated in a written agreement.

In addition, job informalization gives rise to market segmentation, as illustrated in the pyramid above. Chen (2007) provides an interesting perspective related to informal economic segmentation. The informal economy consists of various layers and segments that can influence income in the sector. At the very bottom of the pyramid are irregular laborers or homeworkers, and freelancers are paid. Companies often contract them using contracts based on social partnership relations. Above these categories are self-employed operators. In the upper pyramid are informal employees and informal entrepreneurs. The informal economy segmentation also represents the level of income obtained. Irregular laborers are in the most recent position in terms of revenue, while informal businessman is in the highest place. Furthermore, this segmentation has a gender dimension. Women dominate informality in the lower segment, while men dominate the upper segment.

In the pattern of industrial relations that exists between business/industry players and
laborers who apply the partnership model, basically popping anomaly. This industrial relation becomes an illusion that obscures the rights and protection of labor. The social partnership has negated labor social security, health insurance, work accident insurance, old-age insurance, etc. This guarantee has become the responsibility of the business actor to protect his laborers. Those who work in informal sectors such as digital-based Micro, Small, and Medium Enterprises (MSMEs), online transportation indirectly experience exploitation. The exploitation of new styles in the digital era became massive after the emergence of various marketplace platforms. The issue of social partnership relations is an issue that needs attention as a representation of the informalization of work in the digital age. This also has an impact on government policies (in this case, the Ministry of Manpower), which have not yet regulated industrial relations in the informal sector into legislation. The lack of regulation has become a crucial problem in which digital economic developments are increasingly massive and support economic growth in Indonesia but have missed attention in regulating industrial relations. The form of social partnership becomes an anomaly and an illusion that should be immediately sought a solution for the protection and welfare of workers in the informal sector.

Partnership-based industrial relations, as outlined above, are found in a variety of jobs. One of them is what happened on one of the online transportation platforms in Indonesia, namely Go-Jek. Online transportation is a new alternative for the people of Indonesia, which facilitates access to mobility only with smartphone-based devices. Moreover, Go-Jek is an informal sector that is much in demand by workers as solutions and job opportunities. In line with the news reported by Geotimes.co.id (9/4/2018), according to Nadiem Makarim, the number of drivers/driver-partners until 2018 has penetrated the figure of 1 million people spread in 50 regions in Indonesia. In Jakarta alone, according to data from the Transportation Society Representative, it absorbed 500,000 workers. This means that Go-Jek drivers have absorbed five percent of Jakarta’s population.

The Presence of Artificial Intelligence and Investment Shifting

Labor-intensive industries are still the primary choice because they can absorb many laborers. This is in line with the 2016 Economic Census released by the Statistics Indonesia (BPS), where labor absorption is dominated by large and retail trade/business (vehicle repair and maintenance industries) as many as 22.4 million people or 31.81 percent of the workforce work in

![Informal Economy Segmentation](image-url)

**Figure 1.** Informal Economy Segmentation
Indonesia. Furthermore, successively followed by workers in the processing industry business sector amounted to 15.99 million people or 22.75 percent, and the provision of accommodation and provision of food and drink amounted to 8.41 million people or 11.97 percent.

However, lately, employment has not been as good as in previous decades. Data from the Indonesia Investment Coordinating Board (BKPM) noted that during the second quarter of 2015 to 2019, investment realization had increased, but employment had decreased. The data above shows that there is an anomaly; the increase in investment realization turns out to be inversely proportional to the level of employment. The increase in investment realization figures does not necessarily increase labor absorption rates. Even the level of employment in Indonesia is decreasing from year to year. Several possibilities caused the anomaly to occur. First, there is a shift in investment characteristics from labor-intensive to capital-intensive. This is still related to the transition to industrial revolution 4.0, which is marked by the presence of artificial intelligence and digitalization, which relatively shifted the characteristics of investment toward capital intensive, technology-intensive rather than labor-intensive.

The presence of a wave of industrial revolution 4.0 marked by digitization, artificial intelligence, and robotic can be said to be enough to “hit” the performance of labor-intensive industries in absorbing labor. Comparable reversal of investment realization figures to labor absorption shows such trends. The presence of 3D Printing, for example, not only cuts production time but also has an impact on reducing labor. If the old way takes weeks or even months to produce spare parts, with a metal 3D printer, the production process only takes a few hours and uses less human labor as an operator.

According to the latest International Labor Organization (ILO) report, there are 242.2 million workers (56 percent) in five ASEAN countries who are at risk of losing their jobs due to the use of an automation system (robot) in the next two decades. That number includes workers in the job market in Vietnam, Cambodia, Indonesia, the Philippines, and Thailand. In Indonesia, the laborers with the highest risks are salespeople in markets and stores, which number 14 million. There are also office employees, a kind of administration, totaling almost 1.7 million. Building laborers and clothing tailors are included; the numbers are 2.1 million and 1.1 million, respectively. This phenomenon looks contrary to the government’s desire to expand labor absorption through labor-intensive industries. Precisely what happened was a climate of loss of employment, especially in manufacturing due to technological developments and the industrial revolution 4.0.

**Criticism of the Digital Sharing Economy Platform**

In this article, it has been decided to use the term “digital sharing economy,” which in prac-

| Quarter II | 2015 | 2016 | 2017 | 2018 | 2019 |
|-----------|------|------|------|------|------|
| Investment Realization (in Trillions of Rupiah) | 135.1 | 151.6 | 170.9 | 176.3 | 200.5 |
| Labor Absorption | 370,945 | 354,739 | 345,323 | 289,843 | 255,134 |

Source: Indonesia Investment Coordinating Board (BKPM)
The digital sharing economy involves a variety of network organizations and individuals. The digital sharing economy is defined as the latest movement consisting of all organizations that allow temporary access to specific resources, brokered by an internet-based platform, in other words, that a person enters a sharing economy when he decides to give or enjoy temporary non-ownership access from underutilized resources (whether in the form of knowledge and skills, time, money, or space) due to internet-based platform. The platform collects dividers which provide and consume resources, and thus, offer alternative ways to consume, finance, or produce (Coupez, 2017).

The concept of the digital sharing economy accelerated by the development of digital technology has now opened access for the wider community to participate in economic activities that have been limited to individual players. Someone who needs a taxi no longer must use the services of a taxi company but can order directly from the car owner through an application. Consumers and laborers are free from large companies with large investors behind them. Driving costs are cheaper, while online taxi drivers can determine work flexibility and benefits.

The evolution of business from technology companies is also considered to overhaul the business order that has been confronting large corporations with consumers and laborers who often must yield. Now, consumers can directly meet with other parties who want to share the products they have. However, this digital sharing economy also gives rise to new anomalies, new forms of capitalism. Hundreds of trillions of rupiah in funds have been disbursed by investors from Wall Street or Silicon Valley, with the goal of course providing maximum profits for these investors. According to Crunchbase data, in the last eight years, Airbnb has received the US $4.4 billion in funds, and Grab has received funding of US $11.56 billion from various investors.

The world economic order in the context of capital owners versus workers and consumers has not changed at all. Capitalists and large corporations remain present, and only players may be different. New players who are more innovative and efficient will replace old players. There is a tendency that corporations get stronger because technology companies often fight with the concept of ‘winner takes all’, which leads to quasi-monopoly. Google dominates search engines on the internet, Microsoft dominates computer software, Android dominates mobile OS, Grab dominates online taxis, Airbnb dominates online platforms for lodging, Facebook (following Instagram & Whatsapp) dominates social media, Amazon and Alibaba dominate e-commerce.

The facts above show that the corporation and the owner of capital behind it are getting stronger; they are controlling the market; consumers are very dependent on them. In some regions, unhealthy practices by large technology companies have received attention from relevant authorities. For example, several technology companies have been fined tens of trillions of rupiah by European Union authorities. In June 2017, for example, the European Union imposed a record fine on Google of 2.4 billion Euros. Google is abusing its dominance in the search engine market, which can harm competitors or consumers.

World Economic Forum (WEF), in an article, even questioned the role of technology companies in the income gap of society. Meanwhile, The Economist magazine revealed that in 2016 half of the abnormally high profits in the US came from technology-based companies. This means that they do not face adequate competition or innovation challenges. Giant companies in technology such as Alphabet / Google, Amazon, Microsoft, Facebook, and Apple not only dominate market share but also have the power to swallow their competitors or potential competitors. No less than 519 companies they have acquired in the last decade.

The anomaly of Industrial Relations on Online Transportation Platform

Based on a study by the Demographic Institute of the Faculty of Economics, University of Indonesia (FEUI) released a few months ago, the income of the Go-Jek application driver-
partners could even exceed the Minimum Wage for Workers (UMP). The survey conducted by the agency stated that around 1,200 of the 3,315 Go-Jek partner respondents claimed to earn an income above Rp3.5 million per month. As a comparison, before becoming a Go-Jek partner, only 264 respondents out of 3,315 respondents had an income above Rp. 3.5 million per month.

However, from various literature studies that were found, it saw an anomaly that emerged from the Go-Jek applicator company in terms of industrial relation with partners or drivers. Several times the applicator developer was marched on by his partner because of the social partnership relation problem, which was considered detrimental, especially the issue of fares. Because, at the beginning of the emergence of Go-Jek, the company provides fare subsidies and incentives that are quite tempting to its partners. As a result, the community massively applied to become its partners. However, on its way, the applicator cannot continue to provide massive fare subsidies as the number of partners swells. On the other hand, other applicators such as Grab also compete in providing fares to attract passengers.

Compiled from CNN news (3/27/2018), thousands of online motorcycle taxi drivers held a demonstration in front of the State Palace of the Republic of Indonesia. This time, protesting the online motorcycle taxi alliance, which calls itself the Gerakan Aksi Roda-Dua Indonesia (Indonesian Two-Wheeled Action Movement), demands government intervention in the rationalization of online motorcycle taxi rates imposed by the applicator. After meeting with the demonstrators’ representatives, the government proposed a minimum limit for online motorcycle taxi rates of at least Rp2,000 per kilometer (km) after calculating the benefits and service costs ranging from Rp1,400 - Rp1,500 per km. However, this figure is still below the proposed online motorcycle taxi drivers. They demand at least a minimum fare of Rp 3,000 per km without the need for additional incentives, such as bonuses and promos. This problem shows that the concept of partnership between the applicator and driver-partners in Indonesia is an anomaly. The position of the applicator and driver as partners is not balanced, for example, in the case of determining fares that tend to be decided unilaterally by the applicator.

Specifically, Nastiti (2017) has even studied the digital economy that uses public transport service platforms in the network (online). According to Nastiti, the economic platform creates rhetoric that dictates needs and creates illusions that eliminate the rights of laborers through the application of “trip” and “bonus” games to cover the exploitation practices of new styles. The economic relations created through this platform are a form of exploitation of new styles that have emerged through play, which makes the workers experience dependence amid the fragile situation left by the government. Nastiti calls this new exploitation style “gamification of work.”

The company covers the practice of labor exploitation within the rhetorical frame of freedom, flexibility, and partnership. This rhetoric rests on the conventional concept of industrial relations where the employer owns the means of production and pays hourly wages. The fact that the company only provides applications is always emphasized to create the impression that the driver is not a labor. Far from being a neutral platform, this application creates a hierarchy between passenger-company-driver. It is the company that is at the peak of power, with control over technology, capital, and access. Meanwhile, passengers act as managers because their rating determines the bonus received by the driver.

Position as a “partner” requires drivers to provide their production equipment (vehicles) and bear the costs of fuel, parking, maintenance, vehicle insurance, and communication from their own pocket money. As a result, the more they work, the more expensive the expenses, the higher risk of fatigue and accidents they face. In the end, the company holds the control in determining labor regulations. After cutting subsidies for the driver, the latest maneuver is to slowly reduce the bonus amount and increase the minimum performance percentage. The company at short intervals changes and
adds rules, while the driver does not have the opportunity to negotiate.

**Digital Sharing Economy as a Dimension Risk of Modernity**

In the development of modernity today, we are confronted with quite severe problems related to domestic labor, where technology transfer functions create demands on the demand for human resources to a high skill level. While the fact is, the composition of the Indonesian workforce is still faced with relatively low productivity and education problems. According to BPS (Statistics Indonesia) data, the number of Indonesians of working age over the age of 15 reached 186.1 million in August 2015. Of these, 26 percent or 48.3 million only had elementary school education. As many as 22 percent have a junior high school education, and 17 percent are senior high school graduates.

Absorption of labor as of August 2016 is still dominated by residents with elementary school education of 49.97 million people (42.20 percent) and junior high schools as much as 21.36 million people (18.04 percent). The population working with tertiary education is only 14.50 million, including diploma graduates of 3.41 million people (2.88 percent) and university graduates of 11.09 million people (9.36 percent). In terms of productivity, Indonesian workers also have relatively low productivity. Based on data collected by the Asian Productivity Organization (APO) in 2014, the level of productivity of Indonesian workers is around the US $ 23 thousand to the total GDP per year. Indonesia still lags from Thailand and Malaysia with the US $ 24.9 thousand and the US $ 54.9 thousand, respectively. Even awfully far from the productivity figures achieved by Singapore in the first position of US $ 125.4 thousand.

The anomaly that occurred gave birth to a risk for workers, because the amount of labor supply in Indonesia exceeds the number of available jobs, as seen from the high unemployment rate. As a result, the bargaining position of driver-partners who need employment is lower. On the other hand, online motorcycle taxi drivers are not workers employed by the applicator. As a result, the rights and obligations of online motorcycle taxi driver-partners are not regulated in Law Number 13 Year on Employment. Indonesia does not yet have a bright legal protection in seeing this new style of social partnership. Even taxi bike transportation modes are not included as public transportation that is recognized in Law (Law) Number 22 of 2009 concerning Road Traffic and Transport.

In the context of this digital sharing economy, it can be explained that the creation of digital platforms such as Go-Jek, Grab poses risks for partners. Risks are caused by technological processes and other processes, such as social, political, and communication processes. Hence, the risk has a close relation with the system, model, and the process of change in modern society. At least it can be identified into three risks faced by laborers and partners in the context of economic digitalization. First, the institutional risks experienced by workers in the digital age can be seen from the shift in work patterns, even experiencing the impact of disruption to job loss. Therefore, the new informal economy sector such as Go-Jek, Grab becomes an alternative in fulfilling jobs.

Second, the risk of social relations experienced by the digital age information society is seen by how labor relations or industrial relations are intertwined between workers and financiers/employers. Modernity supported by digitalization is increasingly blurring the relationship between the two. Moreover, social partnership relation are illusory and obscure labor rights. Third, the risk of ignorance and dependency also makes the complexity of the problem. Community dependencies with investors and investor orientation that depend on technology increasingly eliminate the role between the two. The disaster of this dimension of modernity can further be seen from changes in the erratic division of labor, institutionalized risk environments, awareness of risks (knowledge gaps, lack of certainty), and awareness of limited expertise. Modernity produces risks; society also produces reflexivity, where people finally contemplate every consequence of modernity and begin to deal with it. This is due to the history of the distribution of risk itself, as the wealth of risks is inherent in class
patterns, only the opposite is exact. Wealth accumulates at the top while risk will accumulate at the bottom.

CONCLUSION

In the context of the digital sharing economy, the problem facing Indonesia is whether it is ready to step into a digital society and how the development of digital technology images and culture in Indonesia. Several considerations need to be concluded in this case.

First, the question of determining the concept of technology and digital society, such as what will be built by the government? The development of technology and the digital industry must indeed be seen in parallel with the industrial process with internal logic attached to it. However, technology and digital industries must be viewed critically. That is, the process of the development of the digitalization of society increasingly alienates people from larger structures or even reduces humans to mere technological residues.

Second, the development of digital technology influences social transformation, which includes the integration of industrial optimism and digital-based technology, empowering public participation, state authority, and special forces to act and be socially responsible increasingly. It is necessary to pay attention to the transformation of technology in finding and creating new economies for employment and broader access to information.

Third, the presence of digital sharing economy-based technology companies is not based on an economic ideology but solely based on technology-based innovation, and of course, the economic principles to achieve maximum profits. It should also be noted that the added value to the economy from the novelty of digital technology companies is not necessarily as significant as we imagine today. Cheap online motorcycle taxi rates or free shipping, for example, are not necessarily based on economically sustainable pricing; it could be just a tactic to be a winner in a tight competition ‘winner takes all’.

The limitation of this study is on the current data on the number of informal workers working on a digital platform, therefore it needs to be developed in further research.

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