

Contextualization of Risk Society in the Reality of Digital Work in Purwokerto, Central Java, Indonesia

Wiman Rizkidarajat^{a 1}; Isna Hanny Puspaningtyas^{b 2}; Nethania Romauli^{c 3}; Aulia Putri Maharani^{d 4}

1 Universitas Jenderal Soedirman, Indonesia; 2 Universitas Jenderal Soedirman, Indonesia; 3 Universitas Jenderal Soedirman, Indonesia; 4 Universitas Jenderal Soedirman, Indonesia

a wiman.rizkidarajat@unsoed.ac.id  <https://orcid.org/0000-0003-1946-9565>

b isna.puspaningtyas@mhs.unsoed.ac.id  <https://orcid.org/0009-0005-2269-727X>

c Nethania.romauli@mhs.unsoed.ac.id  <https://orcid.org/0009-0008-3367-1528>

d aulia.maharani@mhs.unsoed.ac.id  <https://orcid.org/0009-0004-1253-5798>

Abstract

This article aims to contextualize Ulrich Beck's thoughts, "Risk Society," regarding precarious digital work in Purwokerto, Central Java, Indonesia. Data was obtained through mixed methods involving forty data sources that carry out digital work of a precarious nature in the online transportation and freelance sectors. The finding of this article is that "Risk Society" can be contextualized through the modernization of the world of work through the gig economy and digital work. Furthermore, modernity also creates three traps in the form of deskilling in the reality of digital work, creating alienation on platforms and dependence on algorithms. Lastly, modernity also creates a reduction in the role of the state when a reflective nature does not accompany it.

Keywords: Risk Society; digital work; precariat work

INTRODUCTION

Ulrich Beck published a premise about a new societal order in a book entitled "Risk Society" in early 1990. In this book, he divided his views regarding the future of human civilization into three chapters. The first chapter is "Living in



the Volcano of Civilization: The Contours of Risk Society," which is composed of two parts, namely, "On the Logic of Wealth Distribution and Risk Distribution" and "The Politics of Knowledge in the Risk Society" (Beck 1992, 10-90). The chapter explains the epistemology of "Risk Society," which occurred because of the passage of time, which brought human civilization to face interlocking nature and social transformation towards a new global order (Chernilo 2021, 15).

The second chapter of "Risk Society" is "The Individualization of Social Inequality: Life Forms and the Demise of Tradition," which consists of four parts, namely, "Beyond Status and Class?", "'I am 1': Gendered Space and Conflict Inside and Outside the Family", "Individualization, Institutionalization, and Standardization: Life Situations and Biographical Patterns", and "Destandardization of Labor" (Beck 1992, 91-139). The chapter explains how globalization changes the natural form of human life from one structured through a communal tradition to one that is individual. This makes humans in the "Risk Society" structure a new individual object that must be read from a new perspective beyond class, status, family, and their role in social life.

The third chapter is "Reflexive Modernization: on the Generalization of Science and Politics," which consists of two parts, namely, "Science beyond Truth and Enlightenment?" and "Opening up the Political" (Beck 1992, 140-183). This chapter is the final part, which describes the conclusion of how the "Risk Society" occurred because of two theses. The first is the historical dialectic, which will repeat the order of society to a feudal order but with the renewal of a more advanced capital system, making humans individualistic and insecure in the distribution of risks. The second is how unreflective modernity can then spread to a more extensive system, in this case, the state, thereby making the state a mere form entity that is impotent because it cannot penetrate its authority in the face of a capital system controlled by a few individuals who have succeeded in overcoming distributional uncertainty—risks resulting from modernization.

The three chapters in "Risk Society" are a complete series for reading about changes in the order of society when faced

with modernity and a new type of capitalism. This completion is due to Beck explaining the sequence of the formation of the "Risk Society" in a precise sequence in the form of changes in space, changes in structure and habits, and reduction of the more extensive system. Apart from being thorough, Beck's premises in "Risk Society" are fluid because things that encourage change in the order of society, modernity, and capitalism are also very fluid.

To prove the completeness and fluidity of his premise, Beck did not stop after producing the premises he presented in "Risk Society". He then developed his previous premises to reflect developments over time and changes in society. The author notes that there are two follow-up articles from "Risk Society". In his first follow-up article, Beck (2010) discussed the contextualization of "Risk Society" in the form of the degradation of human living space through climate change due to modernization, which stretched from the beginning of 2000 to 2010. This article then triggered further writings from several other researchers to discuss that modernization creates an unequal distribution of risks in the form of climate change, which has become a global phenomenon (Laidley 2013; Anguelovski, Connolly, and Brand 2018; Connolly 2019; Block 2020; Jamieson 2020; Faber 2018).

In the sequel of their article, Beck and Blok (2016) show how the risk distribution pattern in the "Risk Society" has become a cosmopolitan phenomenon. Because it is cosmopolitan in a global community, its causes are becoming increasingly diverse (Selchow 2016). The author notes that an example of an attempt to contextualize "Risk Society" in a more cosmopolitan way is in the form of the global disease virus COVID-19 which limits human interaction (Rizkidarajat and Chusna 2022; Ramos 2022; Sparke and Williams 2022; Hussain 2020). The article that was written as the second follow-up to "Risk Society" is the starting point for this article. If examined further, Beck & Blok's article reveals a new practice of changing society that relies on changes in space, structure, and habits while reducing the state's role, which ultimately also triggers the most fundamental change in the practice of modern society: the world of work.

Since Covid-19 hit the world, work has also been affected.

What is visible to the naked eye is how work practices do not have to be carried out in a real space but can be carried out in a digital space. Along with this new reality, discourse regarding a new economic pattern called the gig economy is also starting to emerge. De Stefano (2016, 472-475) explains that the gig economy is a type of economic pattern in modern work that relies on two things, namely crowd work and work on demand via the app. Crowd work is a type of simple work without special skills executed via an online platform that connects an unlimited number of organizations via the internet and allows clients and workers to be connected globally. Then, work on demand via the app is a type of work that is carried out based on a contract when the job seeker is connected to the application and terminates immediately when the job seeker is no longer connected to the application (De Stefano 2016, 474). Restrictions on human interaction during the COVID-19 pandemic triggered societal changes in the unequal distribution of modern risks in the gig economy. Because of its novelty, the phenomenon deserves to be discussed in more depth.

What De Stefano put forward was then developed through other research and uncovered new problems of risk distribution in modern work practices in the digital space. Stewart and Stanford (2017, 427) explain in their article that working in the digital space will present new problems for workers in the form of biased work relationships, thereby creating the term precariat workers or casual workers vulnerable to work relationship risks. Another problem was revealed by Suraj (2018). In his article, it shows that precariat work in the gig economy is a vehicle that is very likely to encourage deskilling for workers because crowd work will encourage the creation of types of work with non-specific abilities so that it will reduce the quality of work which he calls short-term work without welfare guarantees.

Another problem is being seen in the form of platformization. The term platformization is used to create a digital space that brings together workers in one space. Even though it is accumulating in nature, the platformization pattern is always used to make the precariat workers who are gathered in it become more individualistic and unable to

negotiate with their employers' policies (Chan 2019a, 2019b). Furthermore, when platformed, these precariat workers will be supervised and will be made dependent on a micro-matrix that records their work through an application called an algorithm (Rosenblat and Stark 2016).

Such forms of work are found in many parts of the world. In Indonesia, the most apparent form has been seen since the existence of Go-jek and Grab, a transportation startup company founded in 2010. Kodrat (2019) stated that although these two startup companies have officially released driver data, he noted that throughout 2019 it is projected that there are 2.5 million drivers in the Jabodetabek area alone. This projection still needs to be corrected, if you look at the data showing that the Go-Jek Driver application has been downloaded more than 10 million times, and Grab Driver has been downloaded more than 8 million times on Playstore. Apart from Go-jek & Grab, several new startup companies that use platform work schemes in various fields are often used by digital workers in Indonesia, such as Shopeefood, Fiverr, Tirando Music, Upwork.com, Forbis.id, and Glints.

Based on the findings of previous research and specific realities that occur in Indonesia, the author aims to contextualize "Risk Society" in a framework that is close to the author's daily life in the form of the reality of digital work in the form of online transportation and freelance work through digital platform work mechanisms in Purwokerto, Banyumas Regency, Central Java. This article is essential because it provides novelty in the specification of types of work and a new perspective on the reality of digital work through contextualizing "Risk Society" to strengthen previous research findings. Some of the previous research referred by the author includes the first research conducted by Tarigan et al. (2017, 10-13), who found that the Go-jek partnership contract could not be categorized as a valid contract within the Indonesian labor law framework. Second is research from Mustofa (2018, 23-25), which found that the existence of freelance workers, which is an extension of the concept of precariat work, benefits business people because their existence is basically outside of permanent workers. The third research was conducted by Hidayah (2021, 95-98), who found

that freelancers in Indonesia face various uncertainties ranging from uncertainty about salary working hours to social security. The latest research was conducted by Setiasih (2022, 36), who found that online motorcycle taxi transportation is a vulnerable type of public transportation because its existence is against several laws and regulations in Indonesia regarding public transportation and employment.

RESEARCH METHOD

The data in this article was obtained by using mixed methods (Tashakkori and Teddlie 2013, 18-24). This method uses the advantages of each simple quantitative survey. The data were gathered by using this method first, and then being explored through observation and in-depth interviews which is using qualitative method to justify the data more scientifically. The survey was used to get a general idea of the characteristics and working conditions of online motorcycle taxi drivers and freelance workers within the gig economy framework. Meanwhile, in-depth interviews are used to conduct an in-depth exploration of the possible pitfalls faced by digital workers in the gig economy framework in the form of deskilling, platformization, and algorithm monitoring.

The research was conducted in Purwokerto City, Banyumas Regency, Central Java, during August-September 2023. Purwokerto City was used as a research location to prove that digital work no longer recognizes the space that divides the discourse of cities as metropolitan cities and provincial cities (van Klinken 2014, 24-26). A total of forty questionnaires were distributed to obtain purposive data, with 20 questionnaires aimed at online motorcycle taxi drivers, six of whom were interviewed in-depth, and 20 questionnaires aimed at freelance workers who use digital platforms, six of whom were interviewed in depth. The following are the research target criteria:

Table 1. Research Target Criteria

Table 1

Research Target Criteria



These data will then be used by the author to carefully contextualize chapter by chapter in the book "Risk Society." The contextualization method referred to by the author is a method that is carried out by re-conceptualizing a theory in a new reality so that novelty is found in the reading and practice (Moe 2019, 160; Avnoon, Kotliar, and Rivnai-Bahir 2023, 128). With these methods, an in-depth explanation will be obtained regarding the contextualization of "Risk Society" in the reality of digital work in Purwokerto, Central Java, Indonesia.

RESULT AND DISCUSSION**a. Modern Risk Society in the form of the Gig Economy**

"Risk Society" opened with a chapter entitled "Living in the Volcano of Civilization: The Contours of Risk Society." It explains about how modern society Developing from one certainty that becoming the part of their lives. The certainty itself is talking about a situation where the more modern a society is, the more its prosperity increases and the more specific the level of risk exposure (Beck 1992, 22). In modern society, the risk created by the increasing of capital system development around them. The development of capitalism Shifting the local characteristic of risk itself, previously, risk was being defined only in the economical process, but now, it defined to something more globally or bigger (Beck 1992, 38).

This characteristic makes human as part of a capital system increasingly vulnerable because globalization is not accompanied by better guarantees against risks that may be experienced in an economic process (Beck 1992, 40-43). Through these explanations, Beck provides a metaphor that a society living in the development of modernity and capitalism is a society under a volcano whose certainty about the risk of disaster is unknown and cannot be borne by anyone except themselves.

Modernity in the "Risk Society," in fact, did not stop at the beginning of the twentieth century, as predicted by Beck. The phenomena of modernity and uncertainty about insurance against risks that go hand in hand with globalization continue to change the structure of society to this day. In the most obvious example, the contextualization of Beck's premise can be read through a new phenomenon called the gig economy (De Stefano 2016). However, to read the gig economy as the most modern form of "Risk Society" requires a more in-depth reading of previous research.

The first reading of previous research was carried out in Crouch's (2019) article. In this article, the contextualization of "Risk Society" is described as occurring in post-industrial societies, which are forced to get to know new types of work that degrade their abilities, but on the other hand, these jobs offer job freedom with non-specific abilities (Crouch 2019, 14). This offer then created the term precariousness work or freelance which is closely related to odd jobs that do not have fixed working hours and clear work contracts. This type of work then becomes a type of work that cause inequalities situation through unequal distribution of risk itself. Based on the article, there are four types of inequalities, which include (1) gender inequality, (2) inequality in precariat job types based on workers' areas, (3) inequality in the public policy sector, and (4) inequality in political products that provide Risk security towards this type of work (Crouch 2019, 15-22). The existence of precariat work and its unequal distribution of risks in post-industrial society supports the gig economy discourse, which relies on crowd work, which eliminates special skills and works on demand via apps that eliminating clear work contracts (De Stefano 2016, 483).

A second reading was done on the article by Fanggidae et al. (2019). The article "Risk Society" is being read in a way of ex-situ through examples of cases of precariat work that occur in the online transportation sector via the Go-jek platform in Jakarta. Through his research, several significant findings were found in the work of the precariat in the context of "Risk Society," the gig economy and the distribution of risk in one specific place to prove that crowd work and work on demand via apps are things that can penetrate geopolitical boundaries. The results of this research show how the work of the precariat through the Go-jek platform is maintained due to internal factors in the form of government policies and external factors in the form of growing interest from people who finally decide to work in that sector. These two factors diminish the awareness of precariat workers regarding the absence of clear employment contracts in their work practices.

The findings in the two articles above align with the author's findings during research in Purwokerto in August-September 2023. From the research conducted, it was found that the reality of precariat work through crowd work mechanisms and work on demand via app in Purwokerto was found in two types of work, namely in online transportation and freelance. Following are the results of the author's findings:



Duration of Working Hours in the Online Transportation & Freelance in Purwokerto

The absence of a fixed duration of working hours is also supported by twenty data sources in the online transportation sector stating that they do not have a work contract. Employment contracts for workers in this sector are described as "partnerships." However, this term is a way to reduce the obligations of employers towards their workers. Furthermore, twenty data sources in the freelance sector stated that 6 data sources did not have work contracts in their work, five data sources said they had contracts in the form of wages per content produced, seven data sources stated that they had a contract for a certain period, three to six months

and may be renewed based on their digital work performance. The remaining two data sources stated that they have a complete work contract that includes the duration of working hours, minimum wages, social safety net guarantees, and other workers' rights.

The findings in the data above show that the reality of digital work in Purwokerto can be categorized under the gig economy scheme. This is because most data sources carry out crowd work and work on demand via apps without clear official contracts, which leads to risky types of precariat work or odd jobs. Apart from that, most of the data sources also state that the duration of working hours is not fixed and exceeds the standard working time of eight hours, as stated in Law Number 23 of 2003 concerning Manpower. These findings show that the modernization of the world of work through digital work with a gig economy scheme is the most actual form of "Risk Society." Workers in the gig economy scheme are very vulnerable to unfair risk distribution from their work practices.

b. The Traps of Modernity

The next chapter contextualizes "The Individualization of Social Inequality: Life Forms and the Demise of Tradition" with the reality of the gig economy, which in the previous chapter was concluded to be the most modern form of "Risk Society." The focus of the discussion in the second chapter of "Risk Society" is modernity, which forces human to become a very individual creature. This characteristic creates problems because the discussion of human as communal creatures still have not find a consensus yet.

In the third part, "Risk Society," it is stated that modernity raises new questions about whether, The novelty that brought by modernity will change the distribution of class and status from an economic and social perspective or not. (Beck 1992, 95-97). So far, classes in society have been mapped using Webber and Marx's theory which relies on the reality of economic class. The existence of modernity makes distribution of class biased due to unnecessary encouragement for human to become more individualistic

through the process of industrialization and capitalism.

The discussion in the third part, "Risk Society," is then deepened in the sixth part, which discusses the processes of individualism in human. In this chapter, it is explained that class differences have never been eliminated in the process of modernity, which is the process that brought the concept of individualization. On the contrary, both are pulled back, creating a difference in a reflective biography. Through this reflective biography, an obvious line created in the pattern of human individualization. In the example that taken by Beck, it is stated that the more modern the life is, the more someone is being forced to choose between different lifestyles, subcultures, and social ties, eventhough they have the same level of income or class. This process of individualization in modernity makes classes in society biased and ultimately creates "Destandardization of Labor" (Beck 1992, 139).

The class bias in modern society is being reflected in the gig economy of the modern era. The reality of the gig economy creates social classes that are no longer legible through the division of socio-economic roles. The author notes three consequences of class bias in society, which creates the traps of modernity as follows.

b.1. Deskilling in the Reality of Digital Work

Deskilling is a terminology that exists side by side with upskilling in the world of work. If upskilling is a hope that makes a worker carry out his work according to a social trajectory and gain increased abilities in the world of work, then deskilling is the opposite. Heisig (2009, 1643) introduced the concept of deskilling, which includes four aspects, namely: (1) Making work more accessible to do; (2) Limiting the need for skilled labor by simplifying work and making workers easily replaced by other workers or machines; (3) Lowering job specifications from those requiring skilled labor to semi-skilled or even unskilled labor; and (4) Training of workers is replaced by the use of technology that is specifically able to control worker behavior through providing payment incentives, monitoring systems, as well as standard operating procedures.

The phenomenon of deskilling within the framework of the gig economy in Indonesia can be read through two previous studies. The first research was conducted by Fatmawati et al. (2019). The article shows that deskilling is likely to be found in the reality of digital work in the form of online transportation. In his research on one hundred and ninety-four online transportation drivers using the Go-Jek platform in Jakarta, Yogyakarta, and Banyuwangi, it was found that the education level of the research targets was divided into education levels in the form of junior high school at 11%, high school at 66%, and D3 (undergraduate)- S1 (graduate) as much as 23%. From the data, also found that 72% stated that working as an online transportation driver was their primary job, with 28% stating that this job was only a side job.

Another research is the one that conducted by Muhammad et al. (2021). In the article, it is found that the reality of digital work in the gig economy creates work normality wrapped in the term partnership. Using the term partnership, the digital work scheme in the gig economy makes workers forget two things. Firstly, the loss of space, working hours, and wages received. These things arise because digital work in the gig economy is considered something that is flexible and is said not to require time or special skills. Secondly, workers are trapped in ideal job fantasies that rely on bogus partnerships instead of being in clear work contracts in a hierarchical form as found in conventional work practices.

The two findings in the two previous studies above were also found in the results of research conducted by the author, which is depicted in the diagram below:



Education Levels in Online Transportation & Freelance in Purwokerto



Level of Education Compatibility with Precariat Job Types the Online Transportation & Freelance in Purwokerto

Through these data, we found that the deskilling phenomenon also occurs in the reality of digital work in Purwokerto. Deskilling is found in the form of uncertainty

about the job security a person gets based on their level of education. A person's education should be a tool for getting a job that matches the skills obtained through this process. However, in the digital working reality of the gig economy, this premise becomes crude. This is being supported by the findings that show most of the data sources state that their education needs to match their work in carrying out the reality of digital work that supports them either through mechanisms as their main job or simply as a side job to their primary job.

b.2. Platformization and Spaces of Alienation

The applications used by startup companies in digital work practices are being used to move conventional spaces in the form of physical offices into digital offices. However, these changes do not bring changes to the rights of workers. Nieborg and Poell (2018, 4280) give an example of platformization in cultural production involving business study methods, critical political economy, and software studies. The finding is that platformization should not only change conventional space into digital space, but also bring the rights and obligations of cultural workers to platforms in digital space. This reality often only occurs in digital work practices because the work carries out the opposite practices.

Two studies conducted by Wood et al. (2019) and Wood & Lehdonvirta (2022) showed that the platformization of digital work within the gig economy framework tends to only provide an illusion in the form of a workspace that creates attachment. In practice, digital workers are never attached to the platform because they work as independent individuals and are not connected. This makes them just a commodity that does not have a close relationship with each other and is always kept from being connected, thereby experiencing alienation.

The results of the previous research above are depicted in the table and interviews conducted by the author with online and freelance transportation workers as follows:

Table 2

Work types and platforms used by data sources



The results of interviews with online transportation workers are as follows:

It does not help at all. Because through the platform, our money is actually being cut from the platform itself. But, rather than not working, i'd choose to keep on doing this. (RF, 23 years old, Go-jek bike driver. Interview conducted on September 6th, 2023)

Actually, it impacted by our location, which the city. Maybe the previous two platforms (Go-jek and Grab) might help. But the problema is, Shopeefood is something new here. So that we need the fase the condition where, we only have few users, and the fare need to be adjusted with Banyumas' minimum standard, since Banyumas is not a big city, it is not really help for me personally. (F, 23 years old, Shopeefood driver. Interview conducted on September 12th, 2023)

The platform is really helpful, because through the platform we can build a new connection with the users, since most of the users are students. (RA, 22 years old, Kampoes Ojek driver. Interview conducted on September 2nd, 2023)

Furthermore, the freelance results are as follows:

If you say it helps, the platform helps. Because it gathers us in one place, but because I use Upwork, I do not need that kind of space (a conventional office). Just open the application; after all, we work alone. I got a good job in Australia without needing to know or know who they were. My contract is renewed every six months. (FK, 37 years old, freelance graphic design on Upwork. Interview

conducted August 21st, 2023)

The platform is helpful because there are so many types of digital jobs provided. Just look at Fiverr; there are so many different jobs. But there is still no guarantee that there will be clients willing to hire us. (FNB, 30 years old, freelance graphic designer on Fiverr. Interview conducted on August 18th, 2023)

For me, Using the platform is like changing cellphone providers. It depends on the signal and location. Previously I used Glint and now I use Fiverr as my working platform, but it does not matter if our portfolio is still standard. (AGP, 24 years old, freelance graphic designer on Glint & Fiverr. Interview conducted on August 15th, 2023)

The findings on online and freelance transportation workers above show that the platformization in the reality of digital work only moves space from conventional offices to digital offices. Their attachment to the workspace never occurs because they are being forced to work in a very individualistic way through portfolios, ultimately encouraging the creation of a space of isolation. These findings are in line with the findings of Rachmawati et al. (2021, 36-39). In his research, it was stated that gig workers experience much uncertainty even though they are part of the platform. Ultimately, they must bear their risks and cannot expect any protection from the platforms they work on. These workers are also guaranteed not to be able to collect their opinions to negotiate policies issued by the platforms where they work.

b.3. Reliance on Algorithm

The platform used by online transportation workers and freelancers to carry out their role as a digital workspace depends entirely on the details of the matrix that records their work performance, which is then called an algorithm. Chan (2019b) provides an obvious explanation of algorithms in his article. In it, stated that the algorithm in the platform's work provides supervision and creates dependency. Supervision occurs through encouragement so that workers

meet the work standards that must be met. These work standards are sometimes made to seem deliberative by involving workers, employers, and service users in their preparation, turns out, this has become some kind of promises only. This seemingly deliberative supervision ultimately The standards that implemented, create a codependency behavior among the digital workers. They will try to meet the standards imposed by any means, so that, they lost their integrity as human beings in the capital system.

The algorithm system as supervision, which ultimately creates dependency, is being explained further in 2 (two) articles. In the first article, Petre et al. (2019) uses the metaphor of an algorithm as a game system. This article explained that there is a metaphor that an algorithm is a game that describes a system which contains limits on "authenticity" and monitoring tools. Collectively, these metaphors allow platform representatives to perceive attempts at optimizing the "gaming system" through "gaming the system" efforts as violating pseudo-deliberative standards within the platform. These normative boundaries obscure the role of corporations in digital work on platforms because apart from being work standard setters and supervisors, they can also become paternalistic figures in the pattern of digital work on platforms. It is through this pattern that exploitative work is created because a digital worker must be very obedient to fulfill the "game system."

The second article was written by Duffy (2020). In the article, it is explained that algorithms cannot be interpreted as changes to the rules in the world of work that follow changes in the digital workspace. In understanding algorithms, a deep understanding of the consequences for crowd work platform workers and cultural workers is needed. Even though they both depend on algorithms, the findings of the article state that crowd work workers are more vulnerable than cultural workers because their abilities as workers are lower.

The findings in the previous article were also found in research conducted by the author. From 6 data sources, the following results were obtained:

The algorithm in Go-Jek monitors this in a very detailed action. First, the account is suspended. Accounts can be suspended if drivers do not comply with the SOPs implemented. For example, they were not using jackets and helmets labeled Gojek. To monitor this regulation, there is a Go-Jek Task Force (Officer Unit), which often carries out raids on drivers on the highway. Another form of suspended account gives a rating of 1.0 (lowest), accompanied by negative reviews for drivers. Go-Jek accounts will automatically not accept orders for three working days. Even though the account is suspended, drivers can still file an appeal. This appeal will be discussed regarding the root of the problem, along with an explanation of what the driver must carry out. The final decision is dismissal or termination of the partnership relationship.

Second, bonuses. A bonus applies if the driver takes a lot of orders. The Bonus is not really bad, you can get IDR 80,000. Every 20 points will earn IDR 80,000. However, the points for each service are different. For example, Go-food is 2 points, and Go-ride is 1 point. This bonus is calculated from services delivering people, goods, and food at Go-Jek.

Third, rating. A decrease in rating reduces performance on the driver's account. Accepting orders becomes more difficult as the work duration becomes more prolonged. For example, usually in a good rating condition, the driver works within 10 hours. When the rating drops, the working duration can be 12 hours daily.

Fourth, order performance in busy public places, especially restaurants. At lunchtime or dinnertime, drivers who turn on the application will quickly receive orders. For example, in the Mie Gacoan area. Likewise, drivers at Bulupitu station and Purwokerto terminal. However, orders are not always based on distance. Some specific trends and hours influence incoming orders. Apart from that, there is the term "tuyul order (fake order)", which

uses fake GPS by unscrupulous drivers. This fake GPS can take multiple orders for one driver. However, Go-Jek is protected from a system perspective. (A, 25 years old, Go-Jek bike driver. Interview conducted on August 19th, 2023)

So, in Grab, the algorithm is not really fair. We were divided into 3 (three) groups. There are "Jawara, Pejuang and Anggota" (Champions, Fighters, and Members). The algorithm prioritizes the Jawara (Champions) because of their experience, flying hours, and points obtained without strange methods such as null or fake GPS. Pejuang (Fighters) and Anggota (Members) are not prioritized. However, there are so many struggles to be in Jawara (Champions). Maybe it is like we must work full 24 hours to open the application and take it here and there. (H, 30 years old, Grab bike driver. Interview conducted August 23rd, 2023)

The performance of driver accounts in the ShopeeFood application can be improved by taking many orders in one day. The more orders taken, the higher the performance in the following days. For example, when there are two drivers near the order location point, of course, the one who will get the order first is the driver with the highest number of orders on that day or the previous day. Based on that personal experience, I do not just "stay" in one place. When the driver drives around while turning on the application, incoming orders are obtained more quickly. Positive reviews from customers also influence the rating (score 1-5) and driver performance. (I, 23 years old, ShopeeFood motorbike driver. Interview conducted September 13th, 2023)

For algorithms, there are several indicators. Overall, it is referred to as SEO. In SEO, the most important thing is keywords. If you follow the algorithm and understand it using SEO principles, the keywords must appear in the title and first paragraph and then be distributed equally in several other paragraphs. Then, the algorithm

requires images, subtitles, internal/external links, meta descriptions (the essence of the written content), and other factors such as title length and sentence length per paragraph to be considered. That is what makes us "visible." (A1, 21 years old, freelance on Fobis.id. Interview conducted August 25th, 2023)

Algorithms are essential for my work. I work on a platform called Tirando Music. They found me really through a big data algorithm. They are in Surabaya and can connect me with people who need piano lessons in Purwokerto. Apart from that, they also provide online classes for students in Jakarta, Malang, and Timor Leste. In the end, I felt that the rates they offered were too low. I was never given an income-sharing contract. Finally, I tried to run my music school using the Instagram platform. I do not know how they knew that I created my music school. From there, I felt that maybe our algorithm had a collision, and I felt I was being watched. However, I am still working at Tirando. (MA, 30 years old, freelance private music teacher at Tirando Music. Interview conducted September 1st, 2023)

Algorithms play a big role in my work because there are certain hours that make my videos become FYP on TikTok. Making these videos can be FYP if you follow trending sounds so that it is easier for many people to appear frequently on TikTok. (T, 23 years old, freelance content creator on TikTok. Interview conducted September 10th, 2023)

Research findings from the interviews above prove that online transportation workers and freelancers experience dependence on algorithms. On the one hand, they feel watched, but on the other hand, they believe that algorithms are the most appropriate matrix to make them "visible" in the digital way of working through the platform. This fact makes them inevitably consider algorithms as a game process whose rules must be obeyed to ensure the continuity of their work in

any way. This gave rise to the term "gaming the system," which means an attempt to circumvent the gaming standards that digital workers must meet.

c. Reducing the Role of the State

In closing, in "Risk Society," Beck wrote a chapter entitled "Reflexive Modernization: on the Generalization of Science and Politics." In the chapter, it is explained how modernity, like other things, always has a reflective nature. This characteristic should reflect how a social phenomenon always has dialectics to control itself and create self-criticism (Beck 1992, 158). This dialectic and self-criticism can emerge through various other media. Beck gave an example that both can be present in science and political processes. According to him, these two things can control modernity to become something that supports human life. Without both, modernity will create dehumanization. To clarify the form of science and the political process, Beck directly points out that there are institutions that can penetrate the two to create a reflective modernity. This institution is a state that is present in the political process and produces legal products to guarantee the modernization process and the people involved in it (Beck 1992, 186)

Modernity often goes beyond science and political processes to become a social phenomenon that does not guarantee human life. This premise is proven through several previous studies. Frost (2017) provides an example of modernity that cannot be controlled through science and political processes. An example is how the Uber platform creates dehumanization due to modernity that cannot be controlled through science and political processes. In his findings, it was stated that digital work on the Uber platform makes humans lose to modernity and become very vulnerable to the uncertainty of the work process.

On the other hand, the political system in the country needs to regulate this new type of work and reality. Similar research was conducted by Saputra and Bagiastra (2018) and Sagita and Wita (2019) in the context of digital work in Indonesia. Both questioned the legitimacy of digital work in

the form of online transportation in the legal system in Indonesia. The findings in this article are significant because the existence of online transportation is contrary to Law Number 22 of 2009 concerning Road Traffic and Transportation. Furthermore, it was also found that the work contract between the online transportation service provider and its workers was contrary to Law Number 23 of 2003 concerning Manpower. It was considered invalid in the form of a work agreement contract, and there was no guarantee of a social safety net.

The author's findings during research are in line with the previous studies above. In the context of Banyumas Regency, there is a failure faced by the authorized institution, namely the regional government, to face modernity in the form of digital work. For example, when online transportation first appeared in Banyumas, there was resistance to structured forms. These forms are present in sealing (Liputan 6, 2017), raiding of online transportation offices by conventional taxis (Radar Banyumas, 2017), ticketing by the Banyumas Police (Trans Online Watch, 2017), Prohibition of online transportation operations through a circular letter from the Regent of Banyumas (Detik 2017), and an official ban on local government ASN from using online transportation (Banyumas Transportation and Service, 2017).

These forms of rejection are not accompanied by clear solutions offered by the regional government of Banyumas Regency as an institution that has a significant role in overcoming modernity with science and political processes. This made transportation workers at that time targets of vulnerability because they were continuously restricted and even considered equivalent to criminals. This rejection finally subsided after various negotiations for official online transportation to obtain legal guarantees to operate in Banyumas Regency in 2019 (Jatengprov.go.id 2019).

A similar reality occurs with freelancers. These freelance workers suddenly became part of the creative economic discourse promulgated through Regional Regulation Number 5 of 2021 concerning Creative Economic Development. The regulation aims to create a creative ecosystem involving micro, medium, and macro businesses in fields including

applications, game developers, architecture, interior design, visual communication design, product design, fashion, film, animation and video, photography, crafts, culinary, music, publishing, advertising, performing arts, fine arts, and television and radio. This Regional Regulation was promulgated on a timeline that is already very late if you look at the beginnings of the realities of freelance digital work occurring in research. Apart from that, the projected scope of the Regional Regulation is considered too ambitious because it covers efforts from upstream to downstream in developing the creative economy in the Banyumas Regency. For this reason, the freelance digital workers in this research decided to refrain from joining themselves in efforts to develop the creative economy of Banyumas Regency. They choose to remain vulnerable workers because of the lack of clarity in their employment relationship through a firm and clear work contract rather than joining the legal discourse of the creative economy, which is just as gray.

From the explanation above, it can be proven that modernity will be unreflective and encourage dehumanization when it is not accompanied by science and a political process that takes sides. The case in this article shows the occurrence of unreflective modernity in Purwokerto. This has fatal consequences in the form of reducing the role of the state, in this case, regional governments, to accompany modernity with science and political processes through the promulgation of penetrative legal regulations to maintain the pace of modernity in the form of the existence of online transportation and freelancing in the discourse of developing the creative economy.

CONCLUSION

Ulrich Beck's thoughts in "Risk Society" are a premise that should be contextualized with the state of risk distribution in

modern society through the medium of the world of work. This is because the absence of guarantees regarding the distribution of risks is increasingly visible in contemporary work realities through the existence of the gig economy terminology (De Stefano 2016), which emerged because of the acute stage of capitalism, which triggered an increasing diversity of types of work (Crouch 2019) as well as breaking through conventional spatial boundaries such as the spatial limitations of metropolitan cities. and provincial (van Klinken 2014). This reality encourages the creation of traps of modernity in modern society which come in the form of deskilling (Heisig 2009; Muhammad, Roospita, and Nugraheni 2021; Fatmawati, Isbah, and Kusumaningtyas 2019), platformization and spaces of alienation (Nieborg and Poell 2018; Wood et al. al. 2019; Wood and Lehdonvirta 2022), and dependence on algorithms (Chan 2019b; Petre, Duffy, and Hund 2019; Duffy 2020). The most obvious form of "Risk Society" in modern society is the reduction of the role of the state which is unable to provide guaranteed protection for digital workers through the promulgation of legal regulations which are penetrative and binding on all parties involved in the modernization process (Frost 2017; Sagita and Wita 2019; Saputra and Bagiastra 2018).

Several previous studies have offered models for improving security for digital workers in the gig economy. The first research was conducted by Izzati (2018). In his research, it was stated that the best way to improve gig work is to involve academics to develop more favorable employment regulations and encourage the state to be bolder in emphasizing its penetration into the work patterns of startup companies that rely on gig work patterns. Further research was conducted by Stewart and Stanford (2017). In his research, there are five options for improvement in the reality of digital work and the gig economy in the form of, firstly, the existence of authorized institutions that confirm and enforce existing laws. They must emphasize that the relationship between the reality of digital work and the gig economy is a form of employment relationship according to existing laws and definitions. Second, there are legal products that clarify or expand the definition of employment in the reality of digital work and the gig economy.

Furthermore, thirdly, there is the option of creating new categories of workers, as well as defining new rights and protections that are explicitly related to the special conditions of workers on digital platforms. Fourth, the effort sidesteps the challenge of defining the employment status of digital workers by asserting that they are entitled to protection based on the productive work they do. Regardless of the nature of their work, it is always categorized as precariat work. Finally, the option to reconceive what it means to be an 'employer', thus enabling digital workers to have different employers for different purposes.

The contextualization and findings of this article will be able to provide input to policymakers because it contains data that has novelty and in-depth discussion. This is important because the findings of this article show that policymakers are stuttering when dealing with modernity in the form of digital work and the gig economy. This failure ultimately leads to an unequal distribution of risks among digital workers. Apart from that, it is hoped that this article can become a reference for further research that discusses the realities of digital work and the gig economy in provincial cities. So far, research on the realities of digital work and the gig economy has often been carried out in metropolitan cities. This fact creates the opinion that the reality of digital work and the gig economy cannot be found in provincial cities like Purwokerto.

NOTES

[References] Anguelovski, Isabel, James Connolly, and Ana Livia Brand. 2018. "From Landscapes of Utopia to the Margins of the Green Urban Life: For Whom is the New Green City?." *City* 22, no. 3: 417-36. <https://doi.org/10.1080/13604813.2018.1473126>

Avnoon, Netta, Dan M Kotliar, and Shira Rivnai-Bahir. 2023. "Contextualizing the Ethics of Algorithms: A Socio-professional Approach." *New Media and Society* 12, no. 2: 123-33. <https://doi.org/10.1177/14614448221145728>

Beck, Ulrich. 1992. *Risk Society*, translated by Mark Ritter. London: Sage Publications.

Beck, Ulrich. 2010. "Remapping Social Inequalities in an Age of Climate Change: For a Cosmopolitan Renewal of Sociology." *Global Networks* 10, no. 2: 165-81. <https://doi.org/10.2307/j.ctvh8r0w3>

Beck, Ulrich, and Anders Blok. 2016. "Cosmopolitan Communities of Risk: From United Nations to United Cities." In *The Metamorphosis of the World*, edited by Ulrich Beck, 112-39. London: Polity Press.

Blok, Anders. 2020. "Urban Green Gentrification in an Unequal World of Climate Change." *Urban Studies* 57, no. 14: 2803-16. <https://doi.org/10.1177/0042098019891050>

Chan, Ngai Keung. 2019a. "'Becoming an Expert in Driving for Uber': Uber driver/Bloggers' Performance of Expertise and Self-presentation on YouTube." *New Media and Society* 21, no. 9: 2048-67. <https://doi.org/10.1177/1461444819837736>

Chan, Ngai Keung. 2019b. "The Rating Game: The Discipline of Uber's User-Generated Ratings." *Surveillance & Society* 17, no. 2: 183-90. <https://doi.org/10.24908/ss.v17i1/2.12911>

Chernilo, Daniel. 2021. "One globalization or many? Risk society in the age of the Anthropocene." *Journal of Sociology* 57, no. 1: 12-26. <https://doi.org/10.1177/1440783321997563>

Connolly, James J. T. 2019. "From Jacobs to the Just City: A Foundation for Challenging the Green Planning Orthodoxy."

Cities 91: 64-70. <https://doi.org/10.1016/j.cities.2018.05.011>

Crouch, Colin. 2019. "Inequality in Post-industrial Societies." *Structural Change and Economic Dynamics* 51: 11-23. <https://doi.org/10.1016/j.strueco.2019.07.011>

De Stefano, Valerio. 2016. "The Rise of the 'Just-In-Time Workforce': On-Demand Work, Crowdswork and Labor Protection in the 'Gig Economy.'" *Comparative Labor Law Journal* 37, no. 3: 471-504. Electronic copy postprint. <https://doi.org/http://dx.doi.org/10.2139/ssrn.2682602>

Detik. 2017. *Begini Isi SE Bupati Banyumas Terkait Larangan Ojek Online*. <https://news.detik.com/berita-jawa-tengah/d-3556847/begini-isi-se-bupati-banyumas-terkait-larangan-ojek-online> (accessed September 2, 2023)

Dinas Perhubungan Banyumas. 2017. *PNS Banyumas Dilarang Gunakan Ojek Online*. <http://dinhub.banyumaskab.go.id/read/21625/pns-banyumas-dilarang-gunakan-ojek-online> (accessed August 28, 2023)

Duffy, Brooke Erin. 2020. "Algorithmic Precarity in Cultural Work." *Communication and the Public* 5, no. 3: 103-7. <https://doi.org/10.1177/2057047320959855>

Faber, Daniel. 2018. "Global Capitalism, Reactionary Neoliberalism, and the Deepening of Environmental Injustices." *Capitalism, Nature, Socialism* 29, no. 2: 8-28. <https://doi.org/10.1080/10455752.2018.1464250>

Fanggidae, Victoria, Muto P. Sagala, and Dwi Rahayu Ningrum. 2019. "On-Demand Transport Workers in Indonesia." In *Transformations in Technology, Transformations in Work*, 15-47. Germany: Ministry of Foreign Affairs Germany.

Fatmawati, Dian, Falikul Isbah, and Amelinda Pandu Kusumaningtyas. 2019. "Pekerja Muda dan Ancaman Deskilling-Skill Trap di Sektor Transportasi Berbasis Daring." *Jurnal Studi Pemuda* 8, no. 1: 29-45. <https://doi.org/10.22146/studipemudaugm.45301>

Frost, Jimmy. 2017. "Uber and The Gig Economy: Can the Legal World Keep Up?." *SciTech Lawyer* 13, no. 2: 4-7.

Heisig, Ulrich. 2009. "The Deskilling and Upskilling Debate." In *International Handbook of Education for The Changing World of Work*, edited by Rupert Maclean and David N. Wilson, 1639-51. Springer. e-ISBN: 978-1-4020-5281-1.

Hidayah, Ahmad. 2021. "Tantangan Kaum Freelancer dan Pemerintah Indonesia di Era Perkembangan Teknologi Digital." *RESIPROKAL: Jurnal Riset Sosiologi Progresif Aktual* 3, no. 1: 92-104. <https://doi.org/10.29303/resiprokal.v3i1.47>

Hussain, A. H. M. Belayeth. 2020. "State Policies Decrease Movement During COVID-19." *Contexts* 19, no. 4: 51-5. <https://doi.org/10.1177/1536504220977936>

Izzati, Nabiyla Risfa. 2018. "Exploring Legal Landscape of Indonesia's on-Demand Transportation: Case of Go-Jek and The Worker's Social Protection." Preprint, December 26. Available on SSRN. <https://doi.org/http://dx.doi.org/10.2139/ssrn.4146661>

Jamieson, Lynn. 2020. "Sociology of Personal Relationships and the Challenge of Climate Change." *Sociology* 54, no. 2: 219-36. <https://doi.org/10.1177/0038038519882599>

Jatengprov.go.id. 2019. "Gojek Segera Hadir di Purwokerto." <https://jatengprov.go.id/beritadaerah/gojek-segera-hadir-di-purwokerto/> (accessed September 12, 2023)

Kodrat, Setiawan. 2019. "Berapa Jumlah Pengemudi Ojek

Online di Indonesia?." *Tempo Bisnis*, November 13th. <https://bisnis.tempo.co/read/1271465/berapa-jumlah-pengemu-di-ojek-online-di-indonesia> (accessed tanggal August 3, 2023)

Laidley, Thomas. 2013. "Climate, Class, and Culture: Political Issues as Cultural Signifiers in the US." *Sociological Review* 61, no. 1: 153-71. <https://doi.org/10.1111/1467-954X.12008>

Liputan 6. 2017. "Kantor Go-Jek Purwokerto Disegel, Bagaimana Nasib Ojek Daring?" <https://www.liputan6.com/regional/read/3103472/kantor-go-jek-purwokerto-disegel-bagaimana-nasib-ojek-daring> (accessed September 9, 2023)

Moe, David Thang. 2019. "Conceptualizing and Contextualizing with and Beyond Paul Hiebert's Anthropological Models: Toward a Contextual Trinitarian Missiology in Myanmar." *Missiology: An International Review* 47, no. 2: 153-72. <https://doi.org/10.1177/0091829618820024>

Muhammad, Dzaky Yusuf, Rima Anhar Roospita, and Naomy A. Nugraheni. 2021. "Mitos Kemitraan dan Konstruksi Normalitas 'Kerja Gig': Kajian Operasi Kekuasaan Hegemonik." In *Menyoal Kerja Layak dan Adil dalam Ekonomi Gig di Indonesia*, edited by Yeremias T. Keban, Ari Hernawan, and Arif Novianto, 157-74. Yogyakarta: IGPA Press.

Mustofa. 2018. "Pekerja Lepas (Freelancer) Dalam Dunia Bisnis." *Jurnal MoZaiK* 10, no. 1: 19-25. <https://doi.org/10.5281/zenodo.1469323>

Nieborg, David B., and Thomas Poell. 2018. "The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity." *New Media and Society* 20, no. 11: 4275-92. <https://doi.org/10.1177/1461444818769694>

Petre, Caitlin, Brooke Erin Duffy, and Emily Hund. 2019. "'Gaming the System:' Platform Paternalism and the Politics

of Algorithmic Visibility.” *Social Media and Society* 5, no. 4. <https://doi.org/10.1177/2056305119879995>

Rachmawati, Riani, Safitri, Luthfianti Zakia, Ayu Lupita, and Alex De Ruyter. 2021. “Urban Gig Workers in Indonesia during Covid-19: The experience of online ‘ojek’ drivers.” *Work Organisation, Labour & Globalisation* 15, no. 1: 31-45. <https://doi.org/10.13169/workorgalaboglob.15.1.0031>

Radar Banyumas. 2017. “Kantor Gojek Digeruduk Taksi Konvensional Banyumas.” <https://radarbanyumas.disway.id/read/50408/kantor-gojek-digeruduk-taksi-konvensional-banyumas> (accessed August 12, 2023)

Ramos, Stephen J. 2022. “The Body Politic: Planning History, Design, and Public Health.” *Journal of Planning History* 21, no. 1: 3-9. <https://doi.org/10.1177/15385132211021995>

Rizkidarajat, Wiman, and Aidatul Chusna. 2022. “Production of Fear: Visual Analysis of Local Lockdown Warning Signs.” *Suvarabhumi* 14, no. 2: 89-116. <https://doi.org/10.22801/svn.2022.14.2.89>

Rosenblat, Alex, and Luke Stark. 2016. “Algorithmic Labor and Information Asymmetries: A Case Study of Uber’s Drivers.” *International Journal of Communication* 10: 3758-84. <https://doi.org/10.2139/ssrn.2686227>

Sagita, Putu Ari, and I Nyoman Wita. 2019. “Keabsahan Jasa Pengangkutan Ojek Online Di Indonesia.” *Kertha Semaya* 7, no. 2: 1-10. <https://doi.org/10.24843/km.2019.v07.i04.p11>

Saputra, Anak Agung Ngurah Deva Ekada, and I Nyoman Bagiastra. 2018. “Tinjauan Yuridis Hubungan Hukum Antara Driver Go-jek dengan PT. Go-jek Indonesia.” *Kertha Semaya* 6, no. 10: 1-13. <https://ojs.unud.ac.id/index.php/kerthasemaya/article/view/53>

Selchow, Sabine. 2016. "The Paths Not (yet) Taken: Ulrich Beck, The 'Cosmopolitized World' and Security Studies." *Security Dialogue* 47, no. 5: 369-85. <https://doi.org/10.1177/0967010616647859>

Setiasih, Herma. 2022. "Perlindungan Hukum Pengemudi Ojek Online Atas Kontrak Perjanjian Perusahaan Gojek (Study Kasus Pasca Putusan Mahkamah Konstitusi No. 41/PUU-XVI/2018)." *Jurnal Sosial Humaniora Dan Pendidikan* 1, no. 1: 34-8. <https://doi.org/10.55606/inovasi.v1i1.193>

Sparke, Matthew, and Owain David Williams. 2022. "Neoliberal Disease: COVID-19, Co-pathogenesis and Global Health Insecurities." *Environment and Planning A* 54, no. 1: 15-32. <https://doi.org/10.1177/0308518X211048905>

Stewart, Andrew, and Jim Stanford. 2017. "Regulating Work in the Gig Economy: What Are the Options?." *The Economic and Labour Relations Review* 28, no. 3: 420-37. <https://doi.org/10.1177/1035304617722461>

Suraj, Shah. 2018. "The Gig Economy and Skills Traps in Indonesia." *Jakarta Post*, November 21st. <https://www.thejakartapost.com/academia/2018/11/21/the-gig-economy-and-skills-traps-in-indonesia.html> (accessed August 18, 2023)

Tarigan, Debby Tri Sebbiana, I Wayan Wiryawan, and I Nyoman Mudana. 2017. "Analisis Perjanjian Kerjasama Kemitraan PT. GO-JEK dengan Driver Berdasarkan Undang-Undang No. 13 Tahun 2003 Tentang Ketenagakerjaan." *Kertha Semaya* 3, no. 1: 1-14. <https://ojs.unud.ac.id/index.php/kerthasemaya/article/view/30003/18420>

Tashakkori, Abbas, and Charles Teddlie. 2013. Sage

Handbook of Mixed Methods in Social & Behavioral Research, 4th ed. Thousand Oaks: Sage Publisher.

Trans Online Watch. 2017. "Waduh, Resmi Dilarang, Polres Banyumas Akan Tilang Taksi Online." <https://www.transonlinewatch.com/waduhresmi-dilarang-polres-banyumas-akan-tilang-taksi-online/>(accessed September 4, 2023)

van Klinken, Gerry. 2014. "Democracy, Markets, and the Assertive Middle." Introduction of In Search of Middle Indonesia: Middle Classes in Provincial Towns, edited by Gerry van Klinken and Ward Berenschot, 1-32. Leiden: Brill. <https://doi.org/10.1163/9789004263437>

Wood, Alex J., Mark Graham, Vili Lehdonvirta, and Isis Hjorth. 2019. "Networked but Commodified: The (Dis)Embeddedness of Digital Labour in the Gig Economy." *Sociology* 53, no. 5: 931-50. <https://doi.org/10.1177/0038038519828906>

Wood, Alex J., and Vili Lehdonvirta. 2022. "Platforms Disrupting Reputation: Precarity and Recognition Struggles in the Remote Gig Economy." *Sociology* 56, no. 4: 1-18. <https://doi.org/10.1177/00380385221126804>