

## ECONOMIC SOCIOLOGY—SOCIAL ECONOMICS

BARTOSZ MIKA  
University of Gdańsk

### Digital “Putting-out System”—an Old New Method of Work in Platform Economy

*Abstract:* The platform economy—a phenomenon attracting public and academic attention alike—is perceived as a tremendous novelty. The Internet and other IT technologies that bring such platforms alive are said to determine their innovative and modern label. This paper argues otherwise. The role of information infrastructure cannot be properly analysed without discovering the content of labour relations behind it. From the perspective of this paper, the latter is similar to the historical putting-out system. The system that arose in the 18th century and whose participants came from the ranks of formally free, home base labour was strikingly congruous with the modern work-on-demand system. The paper analyzes the features of the contemporary gig economy and points out similarities and differences between the historical putting-out system and its digital incarnation. In conclusion, the paper makes some predictions regarding work on platforms.

*Keywords:* domestic industry, gig, labour relations, work-on-demand, crowdwork

#### Introduction

Like every phenomenon attracting widespread attention, the debate around sharing economy brims up with ambiguity and unclear definitions. As pointed out by Sutherland and Jarrahi (2018), it is an emerging research area with a number of associated terms and lack of consensus on the boundaries between them. In sociology, the sharing economy is usually linked to “idle capacity” (Schor and Attwood-Charles 2017). The main point of interest is the ability to use idle assets in tandem with digital technologies. Online web pages or smartphone apps have become a tool and mediator between entities looking for a product or service and those that possess unused resources and are willing to share them. Frenken and Schor (2017: 2–3) define the sharing economy as: “consumers granting each other temporary access to under-utilized physical assets (...), possibly for money”. A similar definition of “collaborative economy” has been used by The European Commission: “model where activities are facilitated by online platforms that create an open marketplace for the temporary use of goods or services often provided by private individuals” (The Social Protection of Workers in the Platform Economy 2017). Such a broad definition captures the sharing economy not only as a business model but as a more diverse social phenomenon (see for example: Mikołajewska-Zajac, Rodak 2016, Mikołajewska-Zajac 2017).

On the other hand, this broad approach can be misleading too. We will later see that the mere use of web tools utilized in the field of the sharing economy is not enough to

analyze all phenomena thus related as one. ‘The Gig Economy’—a term referring directly to the issues of labour and work—will be more useful here. It comes from the word *gig* as used in the context of music and refers to a single performance of music, often done in an ad-hoc cooperation with other musicians. In the platform economy, it means “the collection of markets that match providers to consumers on a gig (or job) basis in support of on-demand commerce. In the basic model, gig workers enter into formal agreements with on-demand companies to provide services to the company’s clients” (Donavan et. al. 2016: 4). In the gig economy a direct commercial relation is established. Platform owners promise that this relationship will bear the fruit of reducing economic inequality, stopping ecological destruction, enhancing workers rights and empowering poor, disabled and women (Hill 2015, Ravenelle 2017).<sup>1</sup> Simultaneously, the giants of on-demand business refrain from applying the term ‘work’ to this type of relation. Using a pro-market human capital approach, they prefer to call it independent contracting, entrepreneurship or self-employment. The co-occurrence of these two facts cannot be seen as a mere coincidence (Fleming 2017). Positive effects of “gig work” platforms are supposed to be achieved through the use of fundamental market-based mechanisms. On the other hand platforms are criticized for the one-sided perspective (Pasquale 2016), relying on low paid, precarious ‘ghost work’ (Gray, Suri 2019) and microwork (Bergvall-Kåreborn, Howcroft 2014; Irani 2015) or even exploitation (van Doorn 2017, in the context of well-being see Gross et. al. 2018).

Being aware of complexity of presented issue the sociological perspective will be included. We will examine on-demand tasks from the point of view of researcher focusing on work and labour. Classical sociology, critical sociology and sociology of work will be implemented as a theoretical perspective. The key question we want to answer is: to what extent the organization of work in gig economy should be treated as a qualitatively new social and economic phenomenon. The support question will concern the possible future scenarios of the development of platform economy. The method will be the study of existing literature on the subject. Therefore it can be said that the article is a theoretical literature study. In the context of limited terminological consensus, this paper makes a few important contributions. Most of all, it will try to convince the reader that the ideology of novelty and success used by platform economy entrepreneurs’ hides a return to a very old way of organizing business, namely that of the putting-out system. That system, which emerged at the dawn of the industrial age, was based on formally free domestic labour that used their own means of work. The domestic industry, in the same way as modern work-on-demand carried out via platforms, was flexible and organised as a network of individual producers. It ended suddenly after the introduction of factory production. In the paper, we will try to highlight the possible scenarios future dynamics this putting-out system. If platform capitalism does indeed remind the organization of the putting-out system, the history of the latter can be a lesson for the future of the labour market.

---

<sup>1</sup> So we can distinguish ‘the sharing economy’ as a broad social phenomenon, ‘platform economy’ connected directly to commercial market, ‘gig economy’ related to work and ‘work-on-demand’ narrowed to specific kind of work. We will elaborate this further.

### Platform Capitalism as a Putting-out System

Abraham et. al. (2018) compares a platform worker to a day labourer, pointing out that waiting for work at a physical location has been replaced by claiming tasks through on-line intermediators (ie. platforms). Srnicek (2016) suggests direct parallels between platform capitalism and domestic industry. Similarly, Söderberg (2016) develops a comparison of 3D printing community to putting-out system. Recently also, Unger (2019) diagnosing knowledge economy uses the same comparison. Kenney and Zysman (2016) express doubts about the impact of platforms on the economy by stating: “many are now concerned that rather than creating a new source of productivity, we are legitimating a new form of putting out.” So we can say that the idea of looking for an analogy for platform capitalism in the historical forms of work is not new. The point of view of quoted authors is in line with ours in that sense it emphasizes the continuity of the historical process, not a radical break. However none of these authors analyze the key differences between putting-out system and platform economy and only Söderberg presents in detail the features of the former.

Looking for such detailed, sociological presentation, we can turn to classical economic sociology of Max Weber ([1950], 1978), starting with the concept of occupation. In “Economy and Society”, the author defines it as: “the mode of specialization, specification and combination of the functions of an individual so far as it constitutes for him the basis of a continuous opportunity of income or earnings” (Weber 1978: 140). However, a few pages later Weber expresses a reservation: “[t]he occupational specialization without continuous engagement (...) can also exist if (...) there is complete appropriation of the mean of production by worker with following possibilities: (a) in small-scale units (...) producing for commercial enterprises. The latter is the case of domestic industry without expropriation of the mean of production. The worker is formally a free craftsman, but is actually bound to a monopolistic group of merchants who are buyers for his product” (Weber 1978: 143). In his less-known book *General Economic History* Weber (1950: 159–160) develops the idea by adding five stages of the growth of the domestic system: (1) A purely factual factor’s buying monopoly on the work of the craft worker, (2) Delivery of the raw material to the worker by the factor, (3) The control of the production process, (4) The provision of the tool by the factor and (5) The step of combining several stages in production process.

In the modern platform economy we do not observe a “purely buying monopoly” but we can easily see the effect of the “winner-takes-all” principle (Giridharadas 2018). Most platforms operate in a highly concentrated market with one or two dominant economic actors. It is especially true for the Anglo-Saxon capitalism, which dominates among gig work platforms (Graham et. al. 2017). Just as the Webers example shows, we do not see a “continuous engagement” in the work-on-demand process, although it is a relatively repetitive form of activity. According to Lapanjuuri et al. (2018), in Britain 4.4% of adults have worked in the gig economy in the last year. Huws and Joyce (2016) found that 11% of the British labour force had successfully earned income through gig work platforms. Following a similar approach, Katz and Krueger (2016) found that roughly 0.5% of the U.S. labour force was employed through online labour platforms. But simultaneously, according to Hall and

Krueger (2015) over 60% of them had another source of income at that time. In UE only 25% of the platform economy work force was described as “Platform Dependent”, which means that these workers depend mostly on platforms (*The Social Protection of Workers in the Platform Economy* 2017). As in the past domestic production is not a permanent profession or occupation (Lehdonvirta 2018).

The most obvious similarity between the gig economy and cottage industry lies in fact that in both cases labour is based on a single task performed from home using the worker’s means of work. In the historical putting-out system, geographically dispersed individuals and families were contracted to produce goods for the merchant. “The factor”—as Max Weber (1950) calls this entity—provided the raw materials and, after the agreed-upon time, collected the finished goods. Modern work-on-demand via apps operates mostly in the service sector and for that reason the provision of raw materials by the factor looks differently. Instead of supplying the worker directly with the object of work, the platform delivers special and necessary conditions of labour, namely access to the consumer (Srnicek 2016). In both cases, the worker is a formally free micro-entrepreneur who owns their means of work but remains under constant, sometimes oppressive, surveillance of the platform (Aloisi 2015; De Stefano 2016) although not being completely passive (Veen et. al. 2019). In other words, “the factor” establishes basic principles of the work process but is able to control only the result of the work (not the process itself). The workers are geographically dispersed and often recruited from disadvantaged groups (Graham et. al. 2017).

The latter fact can be considered as one of the greatest weakness of the 18<sup>th</sup> century cottage production. The geographical dispersion of producers made it impossible to directly control the production process and forced the merchant to time-consuming travel. Moreover, ‘the factor’ was responsible for bringing the produced commodity to the market. Modern gig economy is different in this respect. First, it makes the status of work on platform legally and politically ambiguous. Second, it creates technologically embedded three-sided market of workers, consumers and the platform. Third, it operates in the service sector. In the following paragraphs we will discuss these issues.

### **Status of Work in the Gig Economy**

As we mentioned before, the preferred labels to describe the participants in labour relations in the gig economy are partners, micro-entrepreneurs or contractors. The official story of platform advocates says that freedom and flexibility connected to that kind of labels are mutually beneficial for the platform and the worker. From the labour relation perspective, it should be rather seen as a part of the historical process of de-standardization and flexibilization of work, weakening collective forms of employee organization and expansion of casual or project-based contracts. All of which is not exclusively connected with the platform economy even when algorithmically managed (Rosenblat, Stark 2016). As De Stefano (2016) points out the gig economy is not a separate silo of the labour market and should be seen as a part of a broader process of ‘market-mediated’ (Kalleberg 2011) employment relation. In other words, it is a segment in which a more general tendency to

“demutualisation of risks” or “disguised employment relationships” appears (see also [Lobel 2011](#)).

[Todolí-Signes \(2017\)](#) enumerate, supposedly self-employed platform users are not embedded in an external organisation (for example unions), are engaged in unbalanced bargaining power relation, lack entrepreneurial opportunities and most importantly are objects of surveillance and control (see also: [Rosenblat, Stark 2016](#)). Simply, platform contractors are workers in everything but legal name ([Mould 2018](#)). The author concludes his enumeration with the following words: “in fact, the only real advantage of using a self-employed worker instead of an employee would seem to be the avoidance of paying social security contributions” ([Todolí-Signes 2017: 7](#)). Alternative work arrangement gives the advantage of greater worker exchangeability, greater control over the results of work and a stronger bargaining position of the entrepreneur. When [Diane Coyle \(2017\)](#) points out that digital platforms are particularly disruptive to incumbent, regulated businesses, she means that they dismantle the existing welfare structures and employee protections. From post-Keynesian perspective, [Friedman \(2014: 172\)](#) states: “for workers, the shift to the gig economy dramatically increases uncertainty and economic risk (...)” Generally speaking in the historical circumstances of a high demand for workers—for example after the Second World War—long-term employee contracts dominate. When the opposite happens, the number of temporary contracts increases. [Friedman \(2014: 176\)](#) points out: “gig jobs declined (...) when workers had more bargaining leverage during the employment boom (...)”. This suggests that it is employers, not employees, who are pushing the gig economy.” [Dunn \(2017: 13\)](#) adds that “the expansion of nonstandard work arrangements (...) is only possible if there is a surplus of workers willing to accept a less stable arrangement.” When we take into consideration the fact that according to International Labour Organisation (2014) between 2014 and 2019 there will have been 213 million of new labour market entrants and that during the last several years population connected to the Internet increased from 15% to 40%, we have a full picture of macrostructural conditions of labour relations in platform capitalism. As [Van Doorn \(2017: 907\)](#) put it: “despite this influx of white middle-class workers, the majority of cleaners, janitors, and home care providers operating in the gig economy are working-class men and women of color, especially in urban areas.”

The fact is confirmed by research. Only in the US the gig economy demand is fulfilled mostly by the local (national) labour force ([Graham et. al. 2017](#)). Generally speaking, in the global gig economy most demand comes from the Global North but the majority of work is carried out in the Global South. Moreover “demand is relatively geographically concentrated, but supply is relatively geographically diffused and workers from low- and high-income countries end up competing in the same contexts” ([Graham et. al. 2017: 8](#); for the US labour market see [Dunn 2017](#), for Southeast Asia and Sub-Saharan Africa [Wood et. al. 2019](#)).

To sum up, we can say that the trends in labour relations visible in the platform economy are definitely part of the wider changes observed since the 1970s. At the same time, platforms are an important factor in strengthening these tendencies by bringing new elements. One of them is technologically embedded three-sided market (in economics, it is called two-sided market but from the broader socio-economic perspective it is obvious that we observe three entities ie. platform, service recipient and service provider).

### **Crowdwork, Work-on-Demand via Apps and the Three-Sided Market**

“The Gig Economy emerged in a perfect storm of several interrelated developments. Advances in digital technologies, the widespread availability of handheld devices, and ever-increasing high-speed connectivity (...)” (Lobel 2011: 2). Without the global reach of the World Wide Web and digital information flow, the network effect would not be possible. Interestingly, as Sutherland and Jarrahi (2018) point out, the technology itself is not usually analysed. In this text, there will be no space for repairing this neglect, but it is worth remembering that maintaining the capabilities of the platform service is the basic concern of gig economy companies. It is mostly because technological infrastructure allows to create a three-sided market in which the platform aims to be only a supplier of digital tools to matching service providers and consumers.

As we saw in the last two paragraphs, the real role of platforms is different. However, it does not change the fact that the triangle of platform—consumer—worker is important. Moreover, it is a feature of both the sharing and the gig economy. As we said in the introduction, the difference is that the former does not contain a commercial element. Schor and Attwood-Charles (2017) notice the absence of money during the transaction does not distinguish sharing from commercial platforms. Both types can involve remuneration or payment. But what is really important, and what Schor and Attwood-Charles (2017) omit, is the type of ownership relationship present in the transaction. According to Stanisław Kozyr-Kowalski et al. (1997), the sociological analysis divides any particular objects of property according to their relation to the commodity exchange and the social division of labour. It refers to personal property, those consumer goods that serve only the needs of the individual and are not subject to market exchange. The same goods are transformed into private property when they can be sold at any time. In the same vein, when a platform service provider receives only modest remuneration and uses it for small, personal, expenditures—i.e. to cover the costs of using the platform—we can classify the platform as part of the sharing economy. On the contrary, when the service provider is earning money for living (does not matter part time or full time) it is a gig work platform.

Difficulties in defining the gig economy do not end with the issue of money. Worse still, the criteria used to distinguish different types of platforms are inconsistent. For example, Coyle (2017: R7) first naively points out “[t]he distinction between sharing economy platforms and other types of platform is not a sharp one, and is arguably mainly marketing” but only one page later the author tries to find a more solid base for the distinction “[i]t is also important to distinguish between different types of platform, such as those for professional workers with high human capital or those providing highly differentiated services” (Coyle 2017: R8). Also Michael Dunn (2017), describing his findings, focuses on what skills and in what branches the work is performed. In turn, in the paper with Kalleberg (Kalleberg and Dunn 2016), the same author applies a distinction based on the type of work performed via platform. Similarly, Aloisi (2015) tries to combine skills and type of work criteria: he declares that the most relevant distinction can be drawn between apps that match demand and supply of different activities such as cleaning, running errands, home-repairs and other apps that offer more specialised service. De Stefano (2016) rightly distinguishes crowdwork and work-on-demand via apps (WOD) just to find out that despite

dissimilarities these forms of work have several features in common, being both enabled by digital, internet based technologies. Friedman (2014: 172), on the other hand, highlights “[r]ather than skill or training, they [gig jobs] are distinguished by the social relations of work, the form of contract not the technology or type of work.”

In our point of view, the technology basis of the gig economy cannot be ignored (as Friedman wants) but should not be overestimated either (as De Stefano do). It creates a three-sided market, broadens this market and makes the network effect possible. At this point, we want to divide commercial platforms (so sharing is excluded) according to the content of work. Three distinctive types emerge.

First, there is the platform of “idle assets” on which work contribution is small and which allows to use one’s own resources. The most paradigmatic example is, of course, Airbnb. It is based on renting out spare flat or house space as short-term accommodation. The user does not engage his or her labour force but the assets they own. The consumer receives access to these assets. The work can be present—for example, cleaning—but it is not the main subject of exchange. For this reason we can not label this kind of platforms as a gig-work platform.

Second is crowdwork. It refers to working activities that imply completing a series of tasks or a single one entirely through online platforms. In that case, such platforms allow the worker to find a online task globally. Crowdwork is possible only in a digital environment and its organization through crowdwork platforms is only one of its varieties. The user/worker sells his / her capacity to work to an individual or organization through a platform.

The third is work-on-demand via apps which involves traditional working activities such as personal transport (Uber), small home repairs, cleaning (TaskRabbit) and so on. It is mediated and channelled through digital tools delivered by a particular platform that also intervenes in setting minimum quality standards of service (De Stefano 2016). The user/worker again sells his/her labour power, but the consumer is usually an individual. Moreover, work itself is performed outside the digital environment and requires direct contact between the service provider and the consumer. Work-on-demand types of platform are paradigmatic examples of modern putting-out systems.

The differences between crowdwork and work-on-demand via apps can be summarized in the form of the following three-sided market diagram and table.

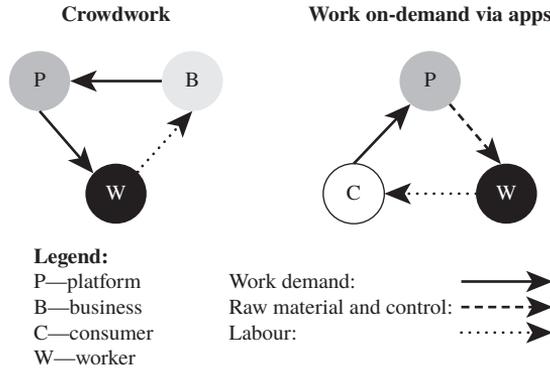
Table 1

**The Main Differences Between Crowdwork and Work-On-Demand via Apps**

<b>Crowdwork</b>	<b>Work on-demand via apps</b>
The ideal means of work and the subject of work take a digital form.	The means and subject of work take an analog / traditional form.
The relationship with the recipient / consumer of the work mediated by the screen.	Direct—usually face to face—relationship with the service recipient.
Tasks can be easily divided into parts.	Tasks / services occur as indivisible units.
Provides services to the global market.	Provides services to the local market.
Microtasks—difficult to measure with standard working time.	Piecework—remuneration dependent on the number of services.

Scheme 1

### The Three-Sided Market of Crowdwork and One for Work On-Demand via Apps



We can point the same major differences between crowdwork and WOD. The most important is the different content of work in the two cases. Activities described as crowdwork are mediated by digital technologies by its nature. When we take into account the tasks described as microwork or click work, such work must be done using a computer and in connection with the Internet. As a result, the range of the market is potentially global both in terms of supply and demand. In WOD via apps the case is different. The labour process itself has to be done using traditional, physical tools. Usually direct contact between service provider and recipient is necessary. As a consequence, the market must have a local character both for workers and recipients. Thus, the presence of platforms has a different meaning in both cases. In the case of crowdwork it is a special type of work organization. In the case of work-on-demand it is a return to the putting-out system described above.

### Mystery of the Gig Economy Success

Before we get to critical remarks on the comparison between the putting-out system and the WOD, it is worth once again pointing out that in the opinion of the gig economy advocates its success has nothing to do with work or labour relations. Competitive advantage of this business model is built on the effects of scale, the elimination of intermediaries and the reduction of transaction costs. Even some scholars sceptical about the platform economy business model stress the importance of these factors (Hill 2015; Ravenelle 2017; Todolí-Signes 2017). Consequently, it is hard to resist the impression that such arguments are presented as if the organization or business model and labour relations were two separate things. For example, Todolí-Signes (2017: 4) emphasize three features important for the gig economy, one of which is “economies of scale or the need for a critical mass.” Diane Coyle (2017: R7) underlines: “positive feedback loop can lead to rapid growth in transaction volumes when a platform manages to attract consumers, which attracts more suppliers, which attracts more consumers.” This positive network effect builds a competitive advantage, making a platform more attractive and more valuable only because of the number of participants.

We also observe a broad consensus concerning lower transaction cost of online commercial relations. For example, Coyle (2017: R11) states: “[t]he advantage of a platform lies in its ability to reduce consumers’ or buyers’ search costs and to reduce shared transaction costs between the various sides.” A similar point of view is recalled by Aloisi (2015: 654), who says: “a few companies are actually skyrocketing their profits thanks to the gigantic use of new technologies that allow cutting transaction costs and containing fixed costs by outsourcing (also offshoring) the workforce.” Also Frenken and Schor (2017: 4) are convinced that the novelty of platform economy lies in “that users now (...) lend goods to strangers, because the Internet has enormously decreased transaction costs between unknown others.”

The problem is that Roland Coase Theorem—to which obvious references we observe in the gig economy literature—can be criticized internally (imminently) and externally (when practically applied). Internally, Meramveliotakis and Milonakis (2018) prove this famous economical principle is, in fact, a logical tautology. If the absence of transaction costs means that no obstacle to bargain exists, exchange participants would be able to negotiate an efficient agreement. “Presumably, if individuals do not reach a mutually advantageous bargain, some obstacle has prevented them from doing so. (...)” (Meramveliotakis and Milonakis 2018: 46). In other words, if there is no solution to the problem through the market exchange of property rights, transaction costs are to blame for it. In our field of interest, this tautology brings up the issue of scientific self-fulfilling prophecy. If the platform economy is able to effectively attracts contractors / consumers and compete with “traditional” business model, it means that it offers a lower transaction cost.

Externally, the very reduction of transaction costs is doubtful. Hill (2015) notes that in many cases, the innovation in the field of matching a customer and service provider is far from spectacular. For example, in the case of Uber and taxi companies, the phone call has been replaced by the usage of the application. Is there really such a huge difference between using the application and making a phone call? Or what is the difference in transaction costs between asking a friend for a proven handyman or using a TaskRabbit? If any, it is the search range. Moreover, social trust based on repeatability of interaction is replaced by brand recognition and participant evaluation system. Notwithstanding, the acceleration of the process and the changing basis of trust is not the same as transaction costs. Furthermore, what usually interest researchers are *ex-ante* transaction costs. But what about *ex-post* costs? One can argue that it is easier to express dissatisfaction with a service using informal social relations or calling a taxi company one is familiar with than to contact a Silicon Valley Giant. In the end, there is no convincing evidence that the *ex-ante* and *ex-post* transaction costs are significantly lower when we use gig-work platforms.

So if transaction costs are not the secret of the gig economy’s success, what is it then? From the point of view presented in this paper, a technological “perfect storm” (Lobel 2011) of the widespread availability of digital devices cannot be separated from labour relations. A platform understood as a technological infrastructure significantly extends the reach and speed of the services market. More people may easily seek to meet the needs and fulfill them faster. This phenomenon creates a scale effect making the given platform more attractive only because of the number of users. The number of participants increases the probability of a rapid service response. From the perspective of work organization, a platform also standardizes on-demand work using official requirements and a rating system (Rosenblat,

Stark 2016). Thus, the acceleration of the process takes place but should be understood as reducing the time from the emergence of the need to satisfying it. Moreover, because work on a platform is not labeled as labour (but, for example in Poland, as self-employment) the cost of demurrage between services is borne by the worker. On the other hand, because the costs of entering such a market are low, workers who have been inactive in labour market are easily attracted to it.

### **Limits of our Comparison and Lessons Drawn from it**

The similarities between historical form of work organization in putting-out systems and modern on-demand work via apps are striking. On-demand workers usually operate on a highly regulated market, the platform is a supplier of the raw material and workers own the means of production. Although some aspects of work remain autonomous, the platform usually establishes and controls basic principles of the work process (especially the results of work), workers are often geographically dispersed, the majority of them have more than one source of income and most are recruited from disadvantaged social groups. The wage of on-demand workers is definitely achievement-best remuneration. The worker receive a task-based salary depending on quantity of labour. Because worker is responsible for amount and speed of labour his or her labour power can be described as a combined one (Tittenbrun 2018). It mean that apart from the main labour the actual content of work included accompanying activities such as maintenance of equipment or cleaning. The on-demand workers are also poorly socialized. The actual labour of that kind of workers is carried out in isolation from other employees. To be more specific the labour process is poorly socialized horizontally but strongly vertically. Strong hierarchical dependence but weak functional interdependence characterize the labour power including monoskills (Tittenbrun 2018).

The difference is that the historical form of putting-out system combined work in domestic industry with traditional agrarian activities. It included peasant family into early capitalistic market. Often this was their first experience of the capitalist form of work organization. Today on-demand platforms reintroduce a putting-out system in completely different circumstances. In large areas of the world, workers are already adapted to the capitalist work discipline. They have internalized not only the factory-type organization but also accepted post-industrial “human capital hoax” (Fleming 2017). They believe that the road to success leads through flexibility and creativity (about the letter see: Reckwitz 2017; Mould 2018). On the other hand, unlike their historical predecessors, workers in highly developed countries do have basic social rights, organizations and traditions.

The second difference between the historical and modern putting-out system concerns the sector of the economy in which particular work is being done so the content of work itself. Gig-economy platforms operate in services in which efficiency improvement is hard to achieve. It is because during a process of work when labour force is activated, a particular utility is created (for example: a drive from one place to another, clean room, fixed sink and so on). When the work process ends, the utility does not take the form of a market good and exists only as the effect of the previous relation between the service provider

and recipient (for example a satisfied passenger). You cannot perform grocery shopping faster than walking to the store or driving a passenger faster than the distance and traffic permits. William J. Baumol (2012: xvii–xviii) calls this phenomenon the cost disease and observes: „in the personal services industries, meanwhile, automation is not always possible, and labour-saving productivity improvements occur at a rate well below average for the economy.” The question Baumol put is how to increase the intensity of the work of a driver, babysitter, dogsitter or handyman? Taking into consideration WOD, a greater efficiency of the sector cannot be achieved by reducing labour time *per se* only by reducing pay labour. Hence so much emphasis on the identification of on-demand workers as independent contractors. As we have pointed out above, the kinds of platforms we discuss are transforming service work by reducing work protection, limiting intermediators and speeding the matching process up (for the socioeconomic analysis of reputation system see [Mikołajewska-Zajac 2017](#)), all this to achieve a critical pool of consumers connected with standardization and the frequency of the service. Simply put the goal of the platform is to extend the range of service (number of services performed in the same time), speed of reaching the service provider and not pay the worker for the time when the service is not performed.

If our observations are accurate, can we predict the fate of the on-demand work platforms based on the history of the putting-out system? We believe that a historical lesson can be instructive in that respect. Despite the fact that the putting-out system has never disappeared completely, it lost its leading role in the British industry in the 1830s. Johan Söderberg (2016) critically recalled Steve Jones’ and David Landes’ argument stressing the impact of the introduction of centralised power sources such as waterwheels and steam engines (also Rifkin [2015] reproduces the same argument). But as Andreas Malm (2016) has recently proved, the putting-out system was abandoned just after the steam engine had replaced the waterwheel as the main source of power. Malm (2016) claims that some other factor was decisive in replacing the “energy from the flow” of steam and domestic industry by the factory system. That factor was the control over the labour force. As we pointed out earlier, the manufacturing process in the putting-out system was geographically dispersed. The workers were not entirely dependent on the merchants for their subsistence, so they tended to divide work according to their immediate needs. Moreover, the faults and raw material losses were entirely on the side of the merchant. As the quoted author puts it: “centralised production [in factories] was advantageous chiefly because the labour process could be placed under stricter control” (Söderberg 2016: 11). Therefore labour conflicts played a fundamental role in the transition to the factory system. Organised industry provided much better control over the production process and was in line with capitalist property relations (Malm 2016).

The question then is whether the same scenario can repeat itself again? Sharing platforms do not use traditional raw materials, do not have to worry—at least seemingly—about small temporary fluctuations in labour supply and are able to effectively “demutualise risks.” But still, there is some evidence that the historical scenario can in fact be repeated and the control over work processes can become the key issue again. Uber’s Initial Public Offer and following fluctuations of the company’s stock price show that the platform entrepreneurs have to have in mind constant expansion on market ([The Economist 2019a](#),

2019b). Recently, the activities via on-demand apps have been recognised as a type of work in developed countries (De Stefano 2016; Aloisi 2015). Workers start to benefit from basic labour rights. If platform workers successfully organize and the national and international legislation recognise their claims, platforms will lose important advantages. The process already begun, not only as a spontaneous market process (Chayka 2015) but also as a part of unions activity (Minter 2017). Today their main concern is the quality of the service they offer. If the service quality falls under the expected level, the network effects of the platform will be threatened. The same applies to the aspect of speed. If labour is not provided fast enough, the consumer might choose another way of fulfilling their needs. For these reasons, the first and second postulate of on-demand workers should be a greater control over the rating system and greater control over the pace of work (both decisive for speed and scope). The third should be the collective control over the matching process (we can observe some precedents in crowdwork, see Lehtonvirta 2018). Fourth negotiation of basic remuneration independent of the number of services performed. If platforms lose control over those aspects of their activity, the retreat from this form of work organization seems very likely. In other words, if workers are able to genuinely control their own work, the market advantage of work-on-demand platform will be over.

It certainly does not mean that platforms will disappear. This business model is too widespread in others sectors of the economy such as social media, e-commerce and crowdwork or “owned assets” platforms. Rather, one of two outcomes may be expected. The platforms might lose their dominant role in favor of community-based, socialized organization of services or they are likely to become the space for smaller, locally operating enterprises. By the latter we understand a situation similar to e-commerce development, when a few years after establishing large websites like eBay, Allegro [in Poland] and partly Amazon they became platforms for local trade enterprises.

## Conclusions

In this paper, we have achieved four goals. First, we defined the sharing economy as a broad social phenomenon including non-utilitarian activities and distinguish it from the platform economy and especially gig work. The latter means the collection of markets that match providers and consumers on a gig (task or job) basis. A particularly important feature of the gig work is the fact that the “idle assets” or “idle capacity” used during activities performed via apps appear as objects of private property. This means they are used as market goods and can themselves be sold (rent, lease and so on). Then we resorted to the rigorous language of Max Webers economic sociology to point out similarities between the 18<sup>th</sup> century putting-out system and modern work-on-demand via apps. We focused on WOD to clearly show how the modern gig economy reminds domestic industry. According to what we said in earlier, work-on-demand differs from other platform activities. Second, we showed why activities in the gig economy should be considered as work, despite the contrary claims of platform owners. Next we showed distinctive types of platforms. At the beginning of our discussion, we showed why Airbnb and other “owned assets” platforms should not be analysed as gig work: simply because in their case the main source of income

is generated by the owned object. We also highlighted differences between crowdwork and WOD. Both are based on wage labour but differ in the shape of the three-sided market. Third, we attempted to show the limitations of our approach, why it is important that platforms operate in the service sector and why most of the literature in the field overestimates the significance of the transaction costs. Finally, we tried to convince the reader that the comparison to the putting-out system is not just a handy metaphor. These two business models are similar in terms of work organization and structure of relations between worker and “the factor.” They differ in terms of the particular content of the work (production vs. services). We can conclude that treating the issues described here as qualitatively new socio-economic phenomena acquires their historical character. We have proved that the way work is organized in WOD is a modern interpretation of the well-known cottage industry. We also showed that, the history of the putting-out can be a lesson for the future of the labour market. If the putting-out system lost its importance as a result of labour conflicts, the same may as well happen with on-demand platforms. Currently, labour via apps is performed by isolated individuals often lacking social benefits and work safety guarantees. They use their own means of production, usually at their own risk. The technologically mediated matching and evaluating system that secures the network effects for the platform owners remains outside the workers’ control. Whenever this changes—regardless of the direct cause—work-on-demand will share the fate of the putting-out system.

## References

- Abraham, K., Haltiwanger, J., Sandusky, K., Spletzer, J. 2018. Measuring The Gig Economy: Current Knowledge and Open Issues National Bureau of Economic Research, Working Paper Series, Cambridge. Available on [www.nber.org/papers/w24950](http://www.nber.org/papers/w24950).
- Aloisi, A. 2015. The Rising of On-Demand Work, a Case Study Research on a Set of Online Platforms and Apps, paper presented at the IV Regulating for Decent Work Conference, ILO, Geneva, 8–10 July 2015. Available at <http://www.rdw2015.org/download>.
- Baumol, J. W. 2012. *The Cost Disease Why Computers Get Cheaper and Health Care Doesn't*. New Haven & London: Yale University Press.
- Bergvall-Kåreborn, B. and Howcroft, D. 2014. Amazon Mechanical Turk and the commodification of labour, *New Technology, Work and Employment* 29: 213–223, [doi.org/10.1111/ntwe.12038](https://doi.org/10.1111/ntwe.12038).
- Chayka, K. 2015. It's Like Uber for Janitors, With One Huge Difference, Bloomberg access November 14<sup>th</sup> 2019: <https://www.bloomberg.com/news/features/2015-10-09/it-s-like-uber-for-janitors-with-one-big-difference>.
- Cherry, M. and Aloisi, A. 2017. Dependent Contractors In the Gig Economy: A Comparative Approach, *American University Law Review* 66(3) Article 1. Available at: <http://digitalcommons.wcl.american.edu/aulr/vol66/iss3/1>.
- Coyle, D. 2017. Precarious and Productive Work in the Digital Economy, *National Institute Economic Review* 240(1): R5–R14.
- De Stefano, V. 2016. The rise of the “just-in-time workforce”: On-demand work, crowdwork and labour protection in the “gig-economy,” *Conditions of Work and Employment Series* 71, International Labour Office.
- Donavan, S. A., Bradley, D. H., Shimabukuro, J. O. 2016. What Does the Gig Economy Mean for Workers?, CRS Report No. R44365, Congressional Research Service.
- Dunn, M., 2017. Digital Work: New Opportunities or Lost Wages?, *American Journal of Management* 17(4): 10–27.
- Fleming, P. 2017. The Human Capital Hoax: Work, Debt and Insecurity in the Era of Uberization, *Organization Studies* 38(5): 691–709, [doi.org/10.1177/0170840616686129](https://doi.org/10.1177/0170840616686129).
- Frenken, K. and Schor, J. B. 2017. Putting the sharing economy into perspective, *Environmental Innovation and Societal Transitions* 23: 3–10, <https://doi.org/10.1016/j.eist.2017.01.003>.

- Friedman, G. 2014. Workers without employers: shadow corporations and the rise of the gig economy, *Review of Keynesian Economics* 2(2): 171–188.
- Giridharadas, A. 2018. *Wimmers Take All. The Elite Charade of Changing the World*. New York: Knopf.
- Graham, M., Hjorth, I., Lehdonvirta, V. 2017. Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods, *Transfer: European Review of Labour Research* 23(2): 135–162.
- Gray, M. L. and Suri, S. 2019. *Ghost Work: How to Stop Silicon Valley from Building a New Global Underclass*. Boston: Eamon Dolan Books.
- Gross, S.-A., Musgrave, G., and Janciu, L. 2018. *Well-Being and Mental Health in the Gig Economy. Policy Perspectives on Precarity*. London: University of Westminster Press. DOI: <https://doi.org/10.16997/book32>.
- Hall, J. and Krueger, A. B. 2015. An Analysis of the Labor Market for Uber's Driver-Partners in the U.S. Working Papers, Princeton University, Industrial Relations Section: 587. Available at: <http://arks.princeton.edu/ark:/88435/dsp010z708z67d>.
- Hill, S. 2015. *Raw Deal: How the "Uber Economy" and Runaway Capitalism are Screwing American Workers*. New York: St. Martin's Press.
- Huws, U. and Joyce, S. 2016. Crowd Working Survey: Size of the UK's "Gig Economy." Available at: <https://unieuropaprojects.org/content/uploads/crowd-working-survey-ukpdf.pdf>.
- International Labour Organization. 2014. *World of Work Report 2014*, Geneva: International Labour Organization.
- Irani, L. 2015. The cultural work of microwork, *New Media & Society* 17(5): 720–739, [doi.org/10.1177/1461444813511926](https://doi.org/10.1177/1461444813511926).
- Kalleberg, A. L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s–2000s*. New York: Russell Sage.
- Kalleberg, A. L. and Dunn, M. 2016. Good Jobs, Bad Jobs in the Gig Economy, *Perspective on Work* 20(2): 10–14.
- Katz, L. F. and Krueger, A. B. 2016. The Rise and Nature of Alternative Work Arrangements in the United States, 1995–2015, Working Paper 22667, National Bureau of Economic Research.
- Kenney, M. and Zysman, J. 2016. The Rise of the Platform Economy, *Issues in Science and Technology* 32(3). Available on: [issues.org/the-rise-of-the-platform-economy](https://issues.org/the-rise-of-the-platform-economy).
- Kozyr-Kowalski, S., Przystalski, A., and Włodarek, J. 1997. *Krytyka rozumu socjologicznego: Praca zbiorowa wydana z okazji 100-lecia urodzin Tadeusza Szczurkiewicza*. Poznań: Wydawnictwo Zysk i Spółka.
- Lehdonvirta, V. 2018. Flexibility in the gig economy: managing time on three online piecework platforms, *New Technology, Work and Employment* 33(1): 13–29.
- Lepanjuuri, K., Wishart, R., Cornick, P. 2018. *The Characteristics of Those in the Gig Economy: Final Report*, London: BEIS.
- Lobel, O. 2011. *The Gig Economy & The Future of Employment and Labor Law*, *Legal Studies Research Paper Series* No. 16–223, University of San Diego.
- Malm, A. 2016. *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming*. London: Verso.
- Meramveliotakis, G., and Milonakis, D. 2018. Coasean Theory of Property Rights and Law Revisited: A Critical Inquiry, *Science and Society* 82(1): 38–66.
- Mikołajewska-Zajac, K. 2017. Terms of reference: The moral economy of reputation in a sharing economy platform, *European Journal of Social Theory* 21(2): 148–168.
- Mikołajewska-Zajac, K. and Rodak, O. 2016. Platformy spółdzielcze jako próba rewizji korporacyjnego modelu gospodarki współdzielonej, *E-mentor* (3)66: 67–73.
- Minter, K. 2017. Negotiating labour standards in the gig economy: Airtasker and Unions New South Wales, *The Economic and Labour Relation Review* 28: 438–454.
- Mould, Oli. 2018. *Against Creativity*. London: Verso.
- Pasquale, F. 2016. Two narratives of platform capitalism, *Yale Law & Policy Review* 35: 309–319.
- Ravenelle, A. 2017. Sharing economy workers: selling, not sharing Alexandria, *Cambridge Journal of Regions, Economy and Society* 10: 281–295, [doi:10.1093/cjres/rsw043](https://doi.org/10.1093/cjres/rsw043).
- Reckwitz, A. 2017. *The Invention of Creativity. Modern Society and the Culture of the New*, Transl. S. Black. Cambridge: Polity Press.
- Rifkin, J. 2015. *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*. New York: Palgrave Macmillan.
- Rosenblat, A. and Stark, L. 2016. Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers, *International Journal of Communication* 10: 3758–3784.

- Schor, J. B. and Attwood-Charles, W. 2017. The “sharing” economy: labor, inequality, and social connection on for-profit platforms, *Sociology Compass* 11(8), [doi.org/10.1111/soc4.12493](https://doi.org/10.1111/soc4.12493).
- Söderberg, J. 2016. The cloud factory: Making things and making a living with desktop 3D printing, *Culture and Organization*, DOI: [10.1080/14759551.2016.1203313](https://doi.org/10.1080/14759551.2016.1203313).
- Srnicek, N. 2016. *Platform Capitalism*. Cambridge: Polity Press.
- Sutherland, W. and Jarrahi, M. H. 2018. The sharing economy and digital platforms: A review and research agenda, *International Journal of Information Management* 43: 328–341.
- Tittenbrun, J. 2018. Theory of ownership of labour power, *Nowa Krytyka* 40: 39–60.
- The Social Protection of Workers in the Platform Economy. 2017. Policy Department A: Economic and Scientific Policy, Study for the EMPL Committee.
- The Economist*. 2019a. Uber’s listing and a new stock exchange may herald change, May 16<sup>th</sup> 2019.
- The Economist*. 2019b. The world this week. Business, August 17<sup>th</sup> 2019.
- Todoří-Signes, A. 2017. The ‘gig economy’: employee, self-employed or the need for a special employment regulation? *Transfer: European Review of Labour and Research* 23(2): 193–205.
- Unger, R. 2019. *The Knowledge Economy*. London: Verso.
- van Doorn, N. 2017. Platform labor: on the gendered and racialized exploitation of low-income service work in the ‘on-demand’ economy, *Information, Communication and Society* 20(6): 898–914.
- Veen, A., Barratt, T., Goods, C. 2019. Platform-Capital’s ‘App-etite’ for Control: A Labour Process Analysis of Food-Delivery Work in Australia, *Work, Employment and Society* 34(3): 388–406.
- Weber, M. 1950. *General Economic History*, transl. by F. H. Knight. Glencoe: The Free Press.
- Weber, M. 1978. *Economy and Society. An Outline of Interpretive Sociology*, edited by G. Roth and C. Wittich. Berkeley, Los Angeles, London: University of California Press.
- Wood, A., Graham, M., Lehdonvirta, V., Hjorth, I. 2019. Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy, *Work, Employment and Society* 33(1): 56–75, [doi.org/10.1177/0950017018785616](https://doi.org/10.1177/0950017018785616).

*Biographical Note:* Bartosz Mika, Ph.D., assistant professor at the University of Gdańsk, Poland. His scientific interests are focused on classical sociological theories, sociology of work, economic sociology and the problem of social inequality. He is a member of the editorial board of *Society Register*. In addition to teaching sociology he is an active member of “The Workers’ Initiative” Trade Union, and activist in the field of Social Cooperatives.

ORCID iD: <https://orcid.org/0000-0001-8204-5373>

E-mail: [bartosz.mika@ug.edu.pl](mailto:bartosz.mika@ug.edu.pl)