

# Manufacturing consent in the gig economy

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## 1 Introduction

Why do workers work as hard as they do? Following the work of Burawoy (1979), labour sociologists have extensively studied this question with regard to employment relationships. It is now widely acknowledged that a labour contract does not suffice to enrol workers into one's enterprise. Sophisticated management schemes have to be implemented in order to secure the workers' consent, most often by creating what Burawoy called an 'illusion of choice'. It is thus with great effort that managers channel the workers' force into value creation. The recent digitisation of work allows businesses to flourish by securing the consent of more workers. Most notably, gig economy platforms have undertaken to automate management to justify their reliance on self-employed workers. The main challenge of this new form of management is twofold. First, the workforce is self-employed, which implies in particular that they should be legally allowed to set their own schedules and decline the jobs they are sent. The workers' enrolment is thus much more fragile since no employment contract can enforce even minimum consent. Second, work is performed remotely, which implies that management must rely on smartphone apps to communicate. In this context, how do platforms manage to automate the manufacturing of gig workers' consent? This chapter will provide new insights by focusing on the management side of food-delivery platforms. The remainder of the paper is structured as follows. The next section will detail the data and methods used to conduct the study. Then, the main section of the paper will discuss, in turn, three management devices that prove crucial in platform management: delivery fees, gamification, and information. This will lead to a concluding discussion in the final section.

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## 2 Methodology

This research draws from an ethnography of the online food-delivery market in Western-Switzerland that was led between August 2017 and December 2018. This field work consisted in an engagement as a bike courier for five of the major platforms in the region for a period of six months. This participation allowed to make contact with numerous couriers, study the app interface, observe the workers in action, as well as the interactions between managers and workers. This direct contact with couriers and managers also provided access to three instant messaging groups, which compiled a total of more than 10'000 messages. The next six months were devoted to the conduct of interviews with couriers (n=24) and managers (n=11) from four different platforms. Finally, I spent a month doing observation among managers inside the offices of a platform. At the time of this study, food-delivery platforms in Switzerland were local and small-scale, operating with at most 10 couriers working simultaneously. One multi-national platform, UberEats, started its operations later during the timeframe of the study. This situation allowed an easier access to the inside of platform management since most headquarters were based in the region. It should be noted that these local platforms differ from multi-national platforms most notably in their use of automation. While UberEats makes great use of sophisticated machine learning algorithms for its matching and pricing mechanisms, the other platforms that are studied here use at most simple algorithms that are configured "by hand", which removes one layer of opacity and allows for a fruitful study (Burrell, 2016). For the sake of anonymity, the platforms will be distinguished only when necessary in the remainder of this paper.

## 3 The tools of acceptance

Delivering meals for an online platform implies long moments of waiting between orders. When waiting for work, couriers are typically outside, maybe close to a restaurant depending on their understanding of the matching algorithm. It is in these moments that the platform sends them what is legally equivalent to a job offer. The platform has to make these offers from afar, using the app to communicate. The tools at its disposal in order to frame this offer are scarce and the decision must be quick. The offer thus

typically consists of a screen displaying selected information about the task and a button on which the couriers can “tap to accept”. We can identify three devices that platforms use to incentivize the couriers to accept the task: the delivery fees, gamification, and information retention. Each will be addressed in turn.

### 3.1 Delivery fees

The delivery fees are the money that couriers get by accomplishing a delivery. They are set by the platform. There are numerous ways to set this payment: hourly pay, fixed piece rate, variable piece rate based on distance or any other criteria. However, platforms systematically choose a pricing scheme that supposedly provides the most incentives to workers. This reasoning is best displayed by one platform that tried to implement different pricing schemes before setting the usual distance-based delivery fee. The managers started by providing an hourly pay, but quickly reversed their decision, invoking biased incentives.

“It wasn’t viable because some [couriers] slacked.”<sup>2</sup> M1

Then, they tried giving fixed piece rate for each delivery, but this time acceptance was low and couriers started refusing tasks that were considered less valuable.

“They realised that it wasn’t very fair because a courier that went far was paid the same rate than a courier with a shorter destination.” M1

By trial and error, these platform managers thus ended up implementing a payment scheme that would set different prices for each delivery according to the criteria that would most closely fit the couriers’ preferences. However, they quickly realised how difficult it would. This endeavour implies first having a good knowledge of the couriers’ preferences and then being able to gather the data and put it into numbers. This leads most platforms to fix the delivery fee as a function of two factors: the distance and the moment of the delivery. First, they take distance into account, often using the Google Maps API, which they realise is probably the most salient criterion. To implement this distance-dependent pricing, they set a base price, which is then incremented per radius of 2km around the restaurant. We should observe for now that it is a close approximation of the

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<sup>2</sup>Athor’s translations (from French)

couriers' ideal, but the increment is made discrete and –most importantly– the distance between the couriers' current location and the restaurant is not taken into account. It is a complaint that managers hear about on a regular basis, but even though it would be technically possible for them to include it in the delivery fee, it would make provisions highly uncertain since the delivery fee would not be compensated by the price paid by the customers. Second, the delivery fee is set to be a function of the moment at which the offer is made. Orders delivered on a Saturday or Sunday night will typically have higher delivery fees, up to twice as high as the delivery fee on a Monday afternoon. This partly responds to the couriers' reluctance to work late at night, but the price scheme is very grossly configured and while it provides incentives for couriers to log in at 7pm on a Saturday, many are still reluctant to accept a similar offer at 11pm. Other more sophisticated platforms are able to include the weather into the frame and provide a fixed compensation per delivery when in case of heavy rain. Overall, at most three criteria are taken into account. In order to minimise the delivery fee while maximising the acceptance, platforms are trying to set a price that could reflect the couriers' preferences. But how exactly do couriers evaluate deliveries? Couriers have a very clear view of what their ideal delivery would look like. Among the criteria that make for a good delivery, they mostly mention the following: the distance should not be too long, the itinerary should be flat, the weather nice, the meals should not be too heavy, no traffic jams, not too late at night, and the destination should be central. This implies that starting from a base delivery fee for this ideal delivery, every criterion that is not satisfied should be compensated by an increase in the delivery fee. The pricing scheme thus falls short of the subtle appreciation couriers have of a given task. This unilaterally, ill defined, pricing mechanism is part of the reason couriers are sometimes reluctant to accept a delivery. When couriers see offers whose itinerary goes up a hill, or meals that include heavy beverages, they are sometimes inclined to refuse it. Here is an excerpt from an interview that clearly shows the calculation that couriers make:

*Author:* “Don't you get paid more if it's farther?”

*C1:* “That's bullshit! One franc, after one km! [...] And the other thing is I [always check] the amount of the order. [...] Once [...] I had ten litres in

my backpack!”

We can sense here the gap between the pricing that a platform sets and the courier’s preferences. While platforms want to act as mere vehicles of preferences between buyers and sellers, they actually fall short of the market-clearing prices. Here lies a fundamental flaw that reveals the inability of platforms to perform as mere passive intermediaries. Much of the efforts of platform management is thus devoted to make up for this imperfect pricing mechanism. Two devices will be leveraged in this regard: the implementation of gaming schemes and the retention of information about the deliveries.

### **3.2 Gamification**

We saw that couriers will be more eager to accept jobs if the pay somewhat reflects the effort they estimate it will require. However, the scarce data available to set these prices still leaves margin for improvement. One more device upon which platforms rely to gain the consent of couriers is to introduce gamification in the working process. We should make clear that by gamification here we refer to a management practice that has little to do with playing, but more with incentivizing by using soft nudges based on the collection of points or rankings that resemble the design of traditional games. Following Woodcock and Johnson (2018), we thus use the term gamification to refer to gamification-from-above. In our case, gamification will take the form of two devices: rankings and rewards. The first, classical, way to incentivize workers is to rank them, display their performance publicly, and expect them to compete against each other for a small reward or just for the sake of competition. This device is widely used among food-delivery platforms. Performance ranking can come in many different forms. Couriers can be ranked according to their average speed, number of kilometres travelled, or number of stops. Figure 1 shows one such typical example. These rankings imply that work should be measured in some way, and this regularly comes with tensions as to the precise setting of the measurement devices. Couriers regularly seek to understand how the ranking is computed in order to behave accordingly. In one notable example, a platform sought to improve the transparency of its performance measures and sent a series of e-mails to its couriers giving details about the exact setting of the computation behind the measurement of the average speed. The

message read as follows:

“Here is an explanation of how the [ranking] works:

- we measure your location every 30 sec.
- we measure the points between your stops only (so riding just for fun won’t influence the results)
- we measure the speed only when it is higher than 5 km/h and lower than 50 km/h.” M2

These messages ultimately resulted in more confusion. Questions were raised about the measurement, most notably how short stops could be identified given that the app was measuring the average speed from recording the location only every 30 seconds. The managers wanted the couriers to be knowledgeable enough to participate in the game, but not too much so that they would not be able to “game the system”.

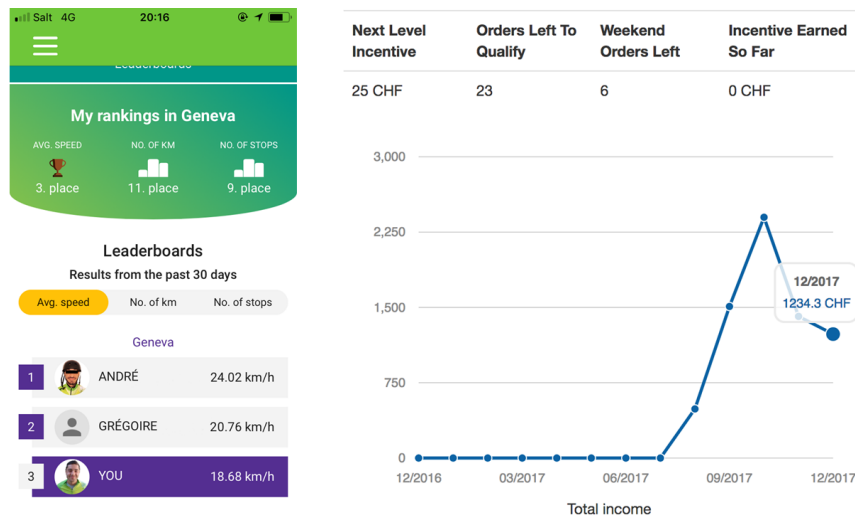


Figure 1: Gamification devices. Rankings (left) and bonuses (right).

Then, platforms also use bonuses as a form of gamification. Bonuses are typically given as a reward for attaining a given number of deliveries per week or month. Bonuses do not imply gamification per se, but platforms put a great amount of effort to display the bonuses as rewards for playing well. One notable feature of every food-delivery app is its dashboard. The dashboard is a screen where couriers can have access to their performance measures at one glance. The attainment of goals to earn bonuses is here displayed in order

to convey a sense of urgency and prompt couriers to increase their acceptance rate. The screen on the right of Figure 1 shows one such dashboard, with a graph indicating the amount of deliveries per months and the “orders left to qualify” for the next financial incentive.

### 3.3 Information

Communication about the job is the ultimate device platforms have at hand to obtain workers’ consent. In order to evaluate an offer, couriers must be provided with information about the delivery. Only this will allow them to assess whether the price is worth the effort. The information provided by the platform is often very scarce and holds on a single screen. Figure 2 shows screenshots of four apps at the moment the offer is made. When couriers receive an order, this is the information that is provided to them and they have to decide whether or not to accept the task. This stage is the most important for platforms since it is by “tapping to accept” that couriers enter in a legal requirement to deliver the meal. What is then the information that couriers are provided with?

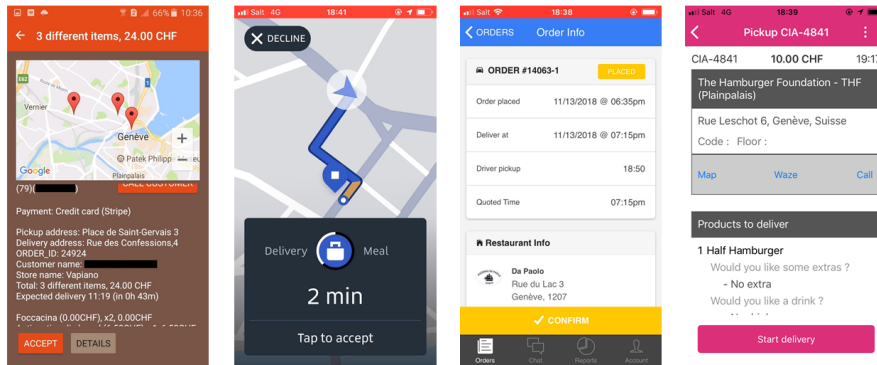


Figure 2: Information available before accepting a job offer

First, let us consider the criterion that is most important according to couriers, which is the delivery fee. Most platforms do not provide any information about what couriers will earn once the order is completed. Only one platform displays a delivery fee (10CHF, on the rightmost screen). The others do not mention the delivery fees. One app provides the detailed route, from which a fee could be vaguely estimated, but most often couriers will have to assess the worth of a task without even knowing what they will earn. This

prevents couriers from refusing deliveries that they may find worthless. For example, this is a manager reacting to a courier picking the deliveries from his past experience of delivery fees:

“The problem with him is that he calculates. He didn’t know how delivery fees were set. But now he sees [Sushi Shop] and realises he can make money.”

M3

This example shows how delivery fees are not aligned with couriers’ preferences, which implies that transparent delivery fees can potentially give rise to couriers discriminating against certain deliveries. The second most important criterion is information about the route. Couriers want to know the distance and location of both the restaurant and the customer in order to evaluate the task. The distance will be decisive since most bike couriers find long rides burdensome. The location of the restaurant is also a matter of concern since the ride between the current location and the restaurant is not paid by any platform. Couriers will thus resent accepting an order that will ask them to ride a long distance to the restaurant. The location of the customer’s place will finally allow the couriers to have an idea of the quality of the route, if it is up a hill, if it goes through a busy neighbourhood, or if it is isolated and has few opportunities for receiving the next order in the vicinity. Information about the route varies greatly between platforms and is a good example of the power platforms have in deciding what information to provide. From our sample above, we can observe that only the first app provides couriers with detailed information about the route. It has a map which displays current location, the restaurant, and the final destination. The other three only provide information about the restaurant, so couriers know where to pick up the meal, but they have no clue about where they will be heading next. Third, the weight and volume of the meal to be delivered can be critical for couriers to evaluate the drudgery of a delivery. Some managers thought about making the information available, but the task was considered technically too cumbersome for the little benefits it would provide.

“We thought about measuring the volume of every article, but it would be too complicated.” M4

Couriers will nonetheless try to estimate the weight from the menu details when available.



From the number of items or the price of the meal to be delivered, it is possible to deduce the weight of a delivery. This will allow couriers to possibly decline an order that would require carrying a heavy meal, or drinks that could potentially be spilled in their bag. However, the information was here only inferred from a design feature that was not primarily intended for such use. From these examples, we can see that platforms take profit of their position of intermediaries in order to thoroughly select the information that couriers will have available in their assessment of each job. This is a precious leverage for platforms that would like to make up for a price scheme that does not always provide the adequate incentives. A typical example is the case of an order that is to be delivered quite far. Such an order would probably come with a generous delivery fee because of the great distance, but the price does not take into account whether the destination is in an isolated location or not. Couriers would then discriminate against certain orders if they were provided all the information. Platforms thus use information to correct this approximate price mechanism.

## 4 Discussion

In this paper, we studied how platforms automate management by leveraging delivery fees, gamification, and the provision of information to enrol workers into as much transactions as possible. Two questions remain open for discussion. What are the effects of such an automation on the work that couriers provide? What does it imply for the study of the gig economy? The efficacy of platform management is difficult to assess. During interviews, couriers regularly denied that those incentives had any effect on their acceptance rate. Most mentioned financial imperatives as the main factor driving their decisions, implying that they would accept any order that was sent to them regardless of the delivery fee, distance, bonus or any other criterion. They just need the money and being picky would have been a luxury. However, later in the interview, couriers would systematically mention “this one time” it snowed / they were eating / it was late / they stumbled upon a friend, and the order they received suddenly seemed worthless. Let us consider the following quote addressing the influence of bonuses:

“If your shift ends at 6pm and you receive an order at 5:55pm, would you take

it? Well if it's the 15th, you take it [(and get a bonus)]. If it's the 8th, you might think 'I have other plans, and refuse it.' C2

Even though overall couriers are mainly driven by financial necessity, platforms rely on these incentives to increase the acceptance rate at the margins. This hold on the deliveries that are most delicate to secure will prove essential in the competition among platforms. In this sense, it becomes essential to include the tools of platform management into the framework of analysis to understand the labour market that platforms organise. The data that is gathered as well as the algorithms that process it allow platforms to exert considerable control (Lee et al., 2015). From our observations, we can distinguish two ways in which markets are affected by platform management. First, the quantity of labour provided by couriers is best understood as arising from their enrolment by the platform. Far from providing a mere intermediation device between supply and demand, platforms are acting upon the quantity of labour on many levels. Be it through the pricing scheme, information retention, or gamification, the platform is enrolling its workforce in a way that is reminiscent of the marketing techniques that are used to seduce its customers. The ultimate quantity of labour that is provided in this market is thus less the result of an equilibrium than the result of asymmetries embedded in the working tools (Rosenblat and Stark, 2016). Second, the prices in this labour market are dependent on the measurement tools accessible to the platform. Far from the ideal equilibrium price that algorithms are supposedly be able to compute, the delivery fee that couriers are granted is based on the data that platforms are able to gather. The price of a delivery is thus set according to a limited number of criteria such as distance, time, and weather, and each of these is approximated using the available computational tools at disposal. This mere estimation of couriers' propensity to work gives rise to a complex game of evaluation between platforms and couriers' in assessing the worth of a delivery. It is by studying this game that our analysis led to a thorough understanding of price setting in this market. On the one hand, managers are trying to anticipate the workers' preferences, and on the other couriers are behaving according to the information that the app affords. What this detailed inquiry revealed is that market intermediaries play a crucial role in the shaping of markets and studying them is best done by looking at the tools they provide to the actors involved.

The gig economy is an ideal case study for such an endeavour, since they undertake to build labour markets from top to bottom.

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