

MASTER'S THESIS

The Effect of Digital Labour Platform (DLP) Customer-Gig Worker Rating Systems on Gig Worker Well-being: an exploratory study

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The Effect of Digital Labour Platform (DLP) Customer-Gig Worker Rating Systems on Gig Worker Well-being: an exploratory study

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Abstract

There is a moving trend of workers working on DLPs, who are not protected by labour laws or managed by HRM professionals. While working on DLPs gives them many benefits such as working from home and organising their own time, it also comes with many drawbacks that affect their mental health. This research investigates the effects of rating systems on gig workers. The central research question is: *What is the effect of digital labour platform (DLP) customer-gig worker ratings on the working behaviour and well-being of gig workers?*

The reaction of gig workers receiving DLP ratings, the influence of customer ratings on gig workers, and effects of rating systems on working behaviour contributed to answering the research question. A qualitative exploratory research design using semi-structured interviews was used in this study.

Findings confirm that rating systems have a negative effect on new DLP workers' well-being. Once more experienced, positive ratings increased their confidence and made them less anxious when delivering their work. Workers use various strategies to bypass the restrictions of DLPs. This study contributes to gig worker experiences working on DLPs and the effects of rating systems on their well-being.

Summary

The traditional workplace has been changing the past 10 years with a shift from traditional contracted workers in organisations to DLP workers. These workers take on short jobs/projects without contracts with DLP organisation. Much research has been conducted on benefits of DLP work, their rating systems and drawbacks of rating systems. There still seems to be a gap in understanding the effects of rating systems on gig worker's behaviour and well-being.

This explored the following research question: *What is the effect of DLP customer-gig worker ratings on the working behaviour and well-being of gig workers?* The sub-research questions were: 1) *How do workers perceive the synchronous nature of the customer-gig worker rating systems?* 2) *How do customer-gig workers rating systems influence their behaviour and their work tasks?* 3) *How do customer ratings influence the well-being of gig workers?*

In this exploratory research, I used semi-structured interviews interviewing 7 gig workers on the effect of DLP rating systems on their behaviour and well-being. Fiverr was selected as the case platform to gain more insights into mutual interactions between customers and gig workers. Findings revealed: (1) reasons for moving to a gig work platform, (2) experience and strategies dealing with DLPs, (3) response to customer ratings, (4) dealing with ratings and feedback, (5) strategies to get high/positive ratings. This led to the following propositions:

Proposition 1a: DLPs have unfair customer-gig worker rating systems, which impact the worker's well-being negatively during the first stages of working for the platform.

Proposition 1b: DLPs need to be much more specific in rating methods used by their platform to lower anxiety and create a higher level of well-being for new workers.

Proposition 2a: Constant and immediate feedback on the request of a gig worker was a necessity in this environment to increase the level of well-being.

Proposition 2b: Low rates seem to be a necessity to attract customers, which in turn the gig workers gain customer ratings and eventually lead to higher rates for the same gig.

Proposition 2c: The high service fees of the platform made the gig workers start looking for other ways to bypass the service fees.

Proposition 2d: Customer-gig worker rating systems change the gig worker's behaviour, workers use various strategies to get or maintain a high rating.

Proposition 3a: Initial low-level customer ratings negatively impacted new gig workers' well-being, but over time forced them to work harder, to increase their experience which ultimately increased customer-gig ratings.

Proposition 3b: High service fees cause gig workers to use inventive ways to earn money outside of DLPs.

Proposition 4a: DLPs should be more open and transparent and help new gig workers to understand how the platforms and its rating systems work.

Finally, limitations of this research and recommendations for further research and practice are presented.

Key terms and definitions

Gig worker, awareness of rating systems, customer ratings, gig worker behaviour, gig worker well-being

Keywords and explanations

Keyword	Definition
Algorithmic management/control	A system of control where self-learning algorithms are given the responsibility for making and executing decisions affecting labour, theret involvement and oversight of the labour process (Duggan et al., 2020).
Bid	The pay rates and completion time for jobs or tasks of clients that the gig worker quotes on the digital gig platforms (Wood et al., 2019).
Digital work platform or labour platform	A combination of hardware and software that provide a means to outsource and manage employment as a source of income for many people who would otherwise be unable to participate in the job market (Mäntymäki et al., 2019).
Future of Work (FoW)	Describes changes in how work or labour, influenced by technological, generational, and social shifts, will be conducted over the next decade (Gartner, 2022).
Gig economy	A form of work that is mediated and transacted upon using apps or online platforms and is delivered remotely or locally (Wood et al., 2019).
Gig worker	Cloud-based consultants or freelancers who offer professional services to customers via platforms or workers whose services are managed and controlled via digital (labour) platforms and generally performed offline, as in ride-hail, food delivery, home repair, and care work (Vallas & Schor, 2020).
Worker Well-being	The state of a worker being or doing well in life; happy, healthy, or prosperous condition; moral or physical welfare (of a person or community) (Oxford, 2022).

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1. Introduction

1.1. Context of the study

The future of work has been changing in the past years and with the introduction of the gig economy, there has been a shift from contracted workers to gig workers. Gig work is defined as temporary or freelance work performed by an independent contractor on an informal or on-demand basis (Oxford, 2022). According to Mastercard (2020), there were 43 million gig workers worldwide in 2018 and they expect this to grow to 78 million in 2023. In The Netherlands, there was a rise from 1.3 million gig workers in 2018 to 1.5 million gig workers in the second quarter of 2022 (Centraal Bureau voor de Statistiek, 2022).

Most gig workers find more freedom to conduct their work, greater autonomy, being your own boss, flexibility, and no work-time obligations the most important aspects of gig work (Mäntymäki et al., 2019). But with those benefits, there are also many drawbacks. Digital labour platforms such as Uber, MTurk, Upwork, and Deliveroo use algorithmic control to control their gig workers (Chan, 2022; Meijerink & Keegan, 2019; Veen et al., 2020; Wood et al., 2019; Yu et al., 2022). For example, the use of algorithmic control in the form of customer rating systems, 'decides' if a gig worker will get benefits or will be penalized depending on the ratings given (Chan, 2022; Sutherland et al., 2020). When gig workers get high customer ratings, they will be presented with more work and better wages, but when they get low ratings that might result in getting less work or none at all. In the worst situation possible, worker accounts might get deactivated (Sutherland et al., 2020; Yu et al., 2022). As a result, the customer is indirectly influencing these decisions by their ratings of the gig worker.

Although there is quite some research done on the gig economy and gig workers, scant research has been done on the topic of *the effect of customer ratings on gig workers*. Rating systems are designed and implemented in gig labour platforms to maintain quality and control of gig workers in the absence of human supervising these employees (Rosenblat et al., 2017). However, the results of, and effect of these ratings on gig workers and their work behaviour and well-being, are still unknown. Work behaviour in this context refers to how workers conduct their work to the satisfaction of both the DLP and customer requirements. Gig worker well-being is defined as a person or community's ". . . state of being healthy, happy, or prosperous; physical, psychological, or [their] moral welfare" (Oxford, 2022).

In this research, I concentrate on the perception gig workers have about customer ratings (i.e., awareness of and how customers rate them) and how they respond to customer ratings. Furthermore, I will look into the well-being of gig workers when they receive customer ratings.

1.2. Motivation of the study

Rating systems of gig workers are made to enhance and guarantee the quality of work these workers do. Customers can give ratings to gig workers in the form of feedback about the quality of the given work. But according to Cameron and Rahman (2022), customers' feedback ratings are used to either lower the rate of work assigned to gig workers or increase the number of tasks to be executed other than what has been previously agreed to.

In the past years, many topics of the gig economy have been researched, including how this economy works, why it's the future of work, and how rating systems work on digital platforms.

When analysing the various papers, there seems to be a gap in the current literature on the effect of customer feedback as perceived by the gig worker, and how this affects their well-being.

1.3. Aim and Scope

This research aims to provide more insight into the effect customer, client, or consumer ratings have on the behaviour and well-being of the gig workers. I focus on DLPs that use algorithmic control systems using customer ratings to manage workers. In this study, a *gig worker* is described as an individual who provides a freelance service to an entity through a DLP (Berg et al., 2018). Gig work can vary in speciality from small scheduled tasks (e.g. delivery work) to more intensive work (e.g. software development or virtual assistants).

The research scope was limited to the Netherlands and focused only on gig workers' behaviour and their well-being as a result of customer ratings. It also focused only on gig workers working for digital labour platforms that involve the completion of small tasks/projects for clients whereby these tasks need to be delivered according to a daily schedule. In this context, the work is further scoped by focusing only on DLPs that use algorithmic control systems to manage gig workers.

1.4. Research Question(s)

Given the gap in the literature, the central research question for this study will be as follows:

Central research question (CRQ): *What is the effect of DLP customer-gig worker ratings on the working behaviour and well-being of gig workers?*

1.5. Approach and Outcomes

I chose a qualitative exploratory research design consisting of a literature study and semi-structured interviews (Saunders et al., 2019, p. 437) to gain deeper insights into gig worker reactions, feelings and the effect customer ratings have on their well-being. Findings were interpreted using qualitative coding techniques.

1.6. Overview or Outline of the Thesis

Chapter 2 explains the literature review method, themes of the key literature of gig workers and their reaction or behaviour related to customer rating. Chapter 3 concentrates on the methodology, presenting the conceptual design of the research, detail of the participants and data collection and analysis techniques. Chapter 4 presents the findings and chapter 5 discusses the results, implications and conclusion of this research.

2. Literature Background

In this chapter the literature review approach (section 2.1) is first given, followed by the major themes that emerged from an analysis of the literature (section 2.2).

2.1. Literature Review Approach

For the literature search, I drew on the 7-step literature review method as outlined by (Bosua & Dirksen, 2022), as listed below.

Step 1: Define a tentative central research question (CRQ)

In section 1.4 I defined a CRQ, in step 7 below the CRQ will be revisited and refined after analysing the literature.

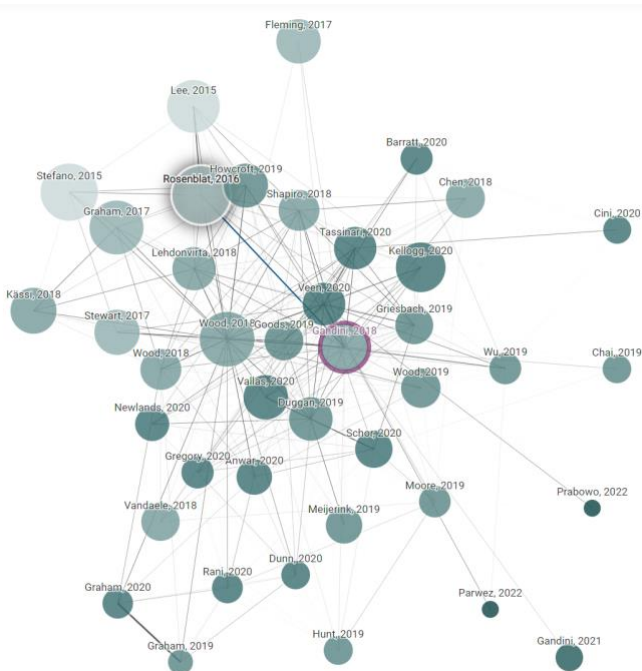
Step 2: Define keywords and search strings representing a tightly delineated research topic, and close link to your CRQ

Before defining keywords, I defined search filters for the literature (e.g., literature had to be published within the past 5 years, between 2017 and 2022, be preferably peer-reviewed and accessible via the OU Library or Google Scholar, the two search engines I used). Furthermore, the literature had to be in English. I used the keywords: *gig economy*, *gig worker*, *customer rating*, *consumer rating*, *gig worker rating*, and *gig worker reaction*. Thus, I used the following search terms; *gig economy*, *gig worker*, *gig worker AND rating*, *gig worker reaction on customer rating*, *gig worker AND consumer OR customer rating*.

Step 3: Conduct a search in the OU library, to find a potential set of relevant papers

Keywords were used to search peer-reviewed literature in the OU Library first, where I could not find enough relevant papers. Using the same keywords, I searched Google Scholar and found more literature, but I could not filter on peer-reviewed papers. To narrow down the results, I only selected papers with a citation count of 10 or more, except for papers that have been published this year. To further narrow down results, I read the abstracts, headers of the paragraphs and conclusions of the papers found, to see if it was relevant to the central research question. With the relevant papers I found, I used connected papers (Connected Papers, 2022) to find more relevant papers which I used to strengthen the chain of evidence (see Figure 1).

Figure 1 *Connected papers graph for gig worker rating*



Note. Once the title of a relevant paper was entered in the “Build a graph” search bar, a network graph is shown with the references that are related to the paper entered initially. The larger the circle, the more citations papers there were. With this tool, I could quickly saw other highly cited papers that were relevant. Next to this graph, one can see the list of papers related to the paper. I read all the abstracts to find relevant papers.

Step 4: Conduct a quick scan of these papers and compile an overview literature review table (LitRev1)

I took a quick scan of the papers I found by reading the abstract, its introduction, and conclusion. When I had doubts about whether the paper contained relevant information, I read the headings and looked at its figures or tables, and decided to keep the paper or drop it. The list of papers I found relevant is included in Appendix 2 Table relevant literature, I will use those for this research. A total of 31 papers were found.

Step 5: Delve deeper into each of the key reference papers and compile a thematic reference table (LitRev2)

With the literature list, the next step was to analyse the papers focusing on the findings in each and notating why it’s relevant to my research. By analysing each paper and reading its findings, conclusion, discussion and/or findings paragraphs, I could filter out six key papers which seemed relevant at first, but did not add to the relevance of my research question. This reduced the total number of papers to 25. Relevant findings were extracted from these papers and added to a spreadsheet, see Appendix 4 Synthesis table, where I organised them into themes based on subjects discussed in each paper. With that in place, I derived key themes which were added to a thematic reference table, see Appendix 3 Table themes.

Step 6: Write up your findings in a synthesized way, highlighting key insights (themes) from the literature and define the gap

The following three themes were found using the thematic reference table;

1. Benefits and drawbacks of the (labour) platform and its algorithmic rating systems.
2. Reaction and behaviour of gig workers on customer ratings, and
3. Gig workers' well-being.

I paraphrased parts in the papers that were relevant to the three themes and placed them accordingly under the appropriate paragraph. While I synthesized the themes, some paraphrases were moved to other themes where they better-matched the subjects. Some of the paraphrases were combined as they contained the same arguments.

Step 7: Revisit your initial central research question that needs answering by way of empirical research and define 2 or 3 sub-questions

After I revisited the CRQ, I defined 3 sub-questions which are stated in section 1.4

2.2. Literature Background

After analysing the thematic reference table, the following three themes were found as discussed below.

2.2.1. Benefits and drawbacks of the platform and its rating systems

There are various digital labour platforms in use by different organisations to facilitate gig work, with most of them using a form of algorithmic control together with rating systems in which customers can rate the gig workers according to their performance and delivered work. The benefits and drawbacks of the platform are not as simple as it seems, as many platforms are non-transparent in how they control the work, and gig workers need to often find this out by themselves.

Platform-based work offers more strict rules and control while promising flexibility and freedom. Gig workers ought to respond in a timely manner accepting their tasks, if they do not, they might face lower ratings and financial sanctions on the platform (Flanagan, 2019). However, working on DLPs give gig workers more autonomy, freedom to choose the work they can do, and to choose whom to work with. It allows them to choose work they would not have experienced before and allows them to connect to multiple foreign clients (Wood et al., 2019). While it seems that gig work is quite accessible, the entry bar for platforms differs, some have higher demands for skills than other platforms (Dunn, 2020).

There are three different types of platforms;

1. The deliverer platform; gig workers use these platforms to accept and deliver food.
2. The driver's platform; gig workers use these platforms to accept and drive customers to their destinations.
3. The skilled work platform; gig workers use it to search for potential gigs based on their experience, and connect with and accept tasks/projects of customers.

Transparency

Although gig workers like to work on DLPs, there are still many things on the platform itself that are concerning. Most platforms operate under significant management control using complex and invisible algorithms using marketing mechanisms, rating systems and online surveillance to control the freedom of the workers, schedules of orders, gig worker pay rates, and exerting pressure to

accept jobs (Griesbach et al., 2019; Mäntymäki et al., 2019). Furthermore, gig workers found it troubling that their accounts might get deactivated when their performance is falling below a certain threshold. There is also this difference between gig workers, whereby the high-performing gig workers would get more orders and are consequently paid more (Veen et al., 2020).

According to Rahman (2021), gig workers found the customer evaluation algorithms of the platform opaque:

- Evaluation criteria; the platform owners can make changes to how customers can evaluate gig workers according to their own will at times.
- Execution of evaluation changes; whereby evaluation change intervals are not consistent.
- The magnitude of the evaluation; the degree of evaluation changes are not clear.
- The impact of the evaluation and the effect of score changes are unclear for future work.
- Who influences the evaluation; which party eventually changes the score is not clear.

Algorithmic control

DLPs are designed as organisational models, with the algorithmic systems as managers controlling their gig workers with the ratings, which prevents workers to socialise with each other while reducing their resistance and unionization potential (Gandini, 2019). Gig workers were rated according to their delivered work, and the more experienced and higher ratings they had, the more work they would receive. In addition, the higher they get on the algorithmic ranking. But the competition to win over a job is quite high, since the instant a job is posted, gig workers all over the world will enter bids. Since there is an oversupply of work, this leads to a battle over jobs and fear of being undercut by other gig workers. Gig workers are also disposable, as many other gig workers are wanting their jobs. Job security on DLPs is also non-existent for those gig workers who view gig work as their main income (Wood et al., 2019).

DLP's algorithmic control is used to attract, manage and retain gig workers, while managing their working time, but at the same time due to the platform's control, autonomy was almost non-existent, and work became less flexible over time (Yu et al., 2022). On DLPs, the need to perform quality control using rating systems is a necessary evil to manage the service quality of gig workers. Even though it might have a great impact on members of protected classes (Rosenblat et al., 2017).

Human Resource (HR) activities of the platform

The algorithms of labour platforms match a client with a worker depending on the acceptance rates or ratings. Hence, algorithmic control embedded in these platforms is used to take on human resource (HR) tasks instead of dedicated HR people doing this. The platform is searching, matching and distributing the work, and managing the performance of gig workers. Thus employment risks are shouldered by the gig workers, as they are seen as self-employed contractors (Duggan et al., 2020). The platform uses the following HR-based activities; expelling gig workers with inappropriate behaviour, offering referral schemes to attract new gig workers, training peers to ensure clients are offered high-quality services, giving instant responses to requests, and matching people with tasks based on their requests. With the rating systems clients can evaluate gig workers and gig workers can evaluate clients, by demanding the gig worker to find labour through the platform, and ensuring that the gig worker can capture a part of the fee when the client doesn't pay HR-based (Meijerink & Keegan, 2019).

Impact ratings on gig workers

Rating systems have a promising future, but at the same time can discriminate against gig workers as labour practises are not always fair (Rosenblat et al., 2017). The platforms offer rating systems allowing clients to rate gig workers, offer incentives, and allow the option to provide developmental feedback (Meijerink & Keegan, 2019). Gig workers with a strong reputation over a long period were more known to clients, highly ranked by platform algorithms, and would get more work presented (Wood et al., 2019).

On some platforms, like Uber, failing to maintain a high rating might lead to the deactivation of a gig worker's account. Customer ratings also impact the visibility on platforms, i.e., with a high customer rating you will get a more prominent place on the platform. With high visibility, the chances of getting more clients will be higher. The completion rate in platform systems might impact the ranking, which in turn also impacts the flexibility of the gig work. It limits the ability to reject orders (Chan, 2022). On some DLPs, the rating system is a game between the organisation, the technical platform and the gig workers. In that case, the rating systems is not considered to be punishing gig workers, but to challenge them to perform better. As the platform changes, so do the gig workers' reactive practices adjusted towards the ratings (Chan, 2019). The rating systems, therefore, push the gig workers into gamification of the work, by pushing them into improving their performance, climbing the rankings and obtaining benefits. The higher the ranking, the more orders will be received and the more revenue the gig worker gets. Some platforms work with badges or special statuses according to the performance and give the high-ranking gig workers special privileges, like selecting specific areas or high-price orders. Platforms even hold competitions so that gig workers can earn gadgets or extra cash (Yu et al., 2022). Most platforms only provide clients to leave ratings, but not the other way around. In this way, gig workers cannot protest, in their eyes, any unfair rating (Flanagan, 2019).

Misuse of customers

On some platforms, customer evaluations determine the visibility and success of the gig worker on that platform. If the systems' algorithm for the evaluation was not transparent, the drivers could not learn how to perform better. In a former study, the system felt like an 'invisible cage' (Rahman, 2021). Former research on other platforms reports that gig workers were forced to comply with unreasonable expectations and requests by customers' misuse of the rating systems metrics (Chan, 2022; Flanagan, 2019).

2.2.2. Reaction and behaviour of gig workers on customer ratings

The influence customer ratings have on gig workers depends on what sort of gig work or on what sort of platform they are working on. There are some tactics gig workers can use as a reaction to customer ratings or when they are unsure what sort of customer requests their service. Gig workers would discuss on forums and by trial and error what metrics do not have negative consequences on their employment opportunities (Chan, 2022; Sutherland et al., 2020). Furthermore, they could filter out difficult customers and attempt to evade them. On some platforms, gig workers can rate customers, so they could use that to filter out difficult customers, but not all platforms have that ability (Anwar & Graham, 2020; Chan, 2022). Communicating expectations to customers was also a way to deal with low ratings and might help to protect gig workers by using the chat facility as evidence (Chan, 2022; Sutherland et al., 2020). An important skill required for gig work is people skills since managing customers' expectations positively influences the perceptions of customers.

Skilled gig workers are more focused on creating a 'personal holding' environment. This relates to similar 'spaces' psychiatrists recommend for secure and comfortable communication (Winnicott, 1986). Gig workers can use such a space allowing them to create their own network of clients and other gig workers, set up their own workspaces, work tasks around the platform if needed, present themselves and create clear boundaries between private and professional lives, and the habits of managing tasks. Between the platforms of different organisations, there might be a difference in the algorithmic control systems. On some DLPs, gig workers can work around some set rules, like contacting clients outside of the platform after making the first contact within the platform, but with other platforms, it is not as easy to work around it as customers only come in contact with workers after an order. Regardless of the platforms, gig workers will keep close attention to customer ratings, anticipate the consequences of the metrics and act accordingly. Low customer ratings could lead to fewer employment chances and important job features (Sutherland et al., 2020).

The battle against algorithms

Gig workers often exchange ideas with more experienced gig workers about their work requirements and conditions based on their reading of gig forums, monitoring their own ratings, analysing the input and outputs of the rating systems, and reading documentation about the platform. The opaque algorithms make it difficult for starters on the platform. To retain autonomy as much as possible, gig workers use various methods to reject a platform's control, for example, some made transactions off-platform after finding clients on the platform (Sutherland et al., 2020). Gig workers resist algorithmic control by using specific tricks to boost the chances of gaining or maintaining access, visibility and reputation, combined with getting high ratings from clients, demanding higher wages and choosing the jobs and the clients (Anwar & Graham, 2020; Bucher et al., 2021). To improve their ratings, they had to take several low-paying jobs or broke up projects into smaller parts to receive ratings for the small project parts. To avoid bad ratings, gig workers sometimes refunded their clients or cancelled the contract without pay, which in turn increased the worker's precarity (Sutherland et al., 2020).

Gig workers often use their knowledge about the rating systems to disallow customers to leave a negative rating or have appropriate customers help them increase their ratings. The most highly rated gig workers are not only delivering good work, they have also studied the gig worker labour process, reacted to clients' demands, analysed how the platforms' algorithms collect and use their data, so they can counter the actions of the platform. (Cameron & Rahman, 2022). Gig workers also share experiences on social media groups on how to avoid bad clients, buying and selling accounts, and information on re-outsourcing jobs, etc. These practices were not limited to social media, but also included their own personal networks. Gig workers filter bad clients when searching for work, negotiate wages by cancelling contracts after delivering outstanding work, withhold work until clients pay them, and leave negative feedback to clients who harass them (Anwar & Graham, 2020). Gig workers sometimes mutually agree with customers to not give ratings to each other, or they choose to give each other a high rating so it's a win-win situation (Meijerink & Keegan, 2019).

Undesirable behaviour

Gig workers are quite inventive in resisting rating systems, but some gig workers are so affected by labour platforms that they behave in a way that is not ethically acceptable. In most situations, there is no real winner, i.e., gig workers nor the platforms nor the customer profit from it. Likewise, with customer service employees, gig workers are likely to sabotage customers after experiencing negative customer treatment (Xiongtao et al., 2021). There are various resistance tactics the worker

can use, for example, they can reject customers and let the platform find other customers, which results in extra time and effort for the platform. Also, gig workers can cancel ongoing work to protect their ratings, as customers cannot rate unfinished work. If previous worker-task allocations and ratings did not work, gig workers can file disputes so the platform needs to invest time to research their low ratings. And gig workers can persuade customers into breaking down projects into smaller parts, so they can get potentially more higher ratings (Cameron & Rahman, 2022) so they can even out their low ratings. Other tactics are using paid fake client ratings, buying high-rated accounts with locations set in the EU or US, setting up multiple accounts to use for bidding and doing free work to get high ratings. Another form of resistance is working on two monitors to deceive the monitoring algorithm as it can only monitor data on one monitor (Anwar & Graham, 2020). In some situations, the gig worker or client can agree to work and pay outside of the platform after getting linked up on the platform (Meijerink & Keegan, 2019), but this might lead to non-payment of the customer where the risk falls on the gig worker.

2.2.3. Gig workers' well-being

Gig workers working on digital platforms have different lifestyles as opposed to employees who have standard schedules and stable incomes. The well-being of gig workers has been a sub-topic in several papers (Bucher et al., 2021; Chan, 2022; Mäntymäki et al., 2019; Ravenelle, 2019; Wood et al., 2019) where these studies look at how gig work impacts their well-being. Many factors influence a gig worker's well-being, for example, positive factors are benefits and support given by the platform while these elements can also have a negative effect on a worker's well-being.

Benefits

Gig workers receive many benefits while working on the platforms, depending on the type of gig work, they get other benefits. The gig workers mention the following benefits;

- Being your own boss.
- Alternative to being unemployed.
- No pressure or stress doing this type of work.
- Work-life balance.
- Flexibility in terms of doing the work.
- Referral rewards.
- Extra income.
- Not having to travel and work from home.

Apart from the benefits of gig work, many gig workers still feel anxious and are precautionous, especially the gig workers who see gig work as their primary income (Anwar & Graham, 2020; Chan, 2022; Myhill et al., 2021). In some instances, platform work does not cope with the current working standards and customers do not have to pay gig workers minimum wages. Gig workers can be fired or hired at will and are not protected by the dismissal law of the country where the gig worker lives (Stanford, 2017). Solving unforeseen problems and complexity add to the job quality of gig workers, while data entry work seemed to be boring.

Social contact between gig workers was also not possible because of the working times, many gig workers had to work more than 40 hours a week, and some even without much rest. Communicating with clients took place when it was convenient for the clients and work was sent when the clients were working. The differences in time zones were not an excuse for gig workers not to work. Many

gig workers working in the gig economy found that their incomes were unstable; they had to work unpredictable hours and schedules, and lacked the promised benefits (Dunn, 2020).

Stress and pressure

Gig workers experience a high level of competition on the platforms and at the same time, the tasks could be highly intensive (Wood et al., 2019). To minimise unpaid downtime, gig workers tried to complete their tasks as quickly as possible, which increased their work intensity, and increase earnings. This led to dealing with multiple clients' deadlines and requirements at the same time (Wood et al., 2019).

The pressure between gig workers developed a response that drove them into creating private social media groups to share tactics for improving individual rankings. Within social media groups outside the platform, gig workers share solidarity bonds and support each other rather than compete with each other. Gig workers in China, for example, are creatively resisting the pressure created by the platform. They work for multiple platforms, refuse to follow specific routes, create fake orders, refuse to accept orders from specific regions, and help each other using social media groups when a driver needs help (Yu et al., 2022).

On skilled work platforms, gig workers were required to present themselves professionally on the platforms' channels, which meant things like chatting with clients or having extra skills (Sutherland et al., 2020). Some gig workers underrate their labour order to increase their chances of getting a match or gaining favourable ratings from clients, which sometimes leads to an increase in their job success score. Furthermore, they often add free labour to fix client issues, provide free work samples, or charge fewer hours than they have really worked. Lowering the hourly rate is also a practice of newer gig workers who have no reputation on the platform yet.

Gig workers are very careful when mentioning bugs, voicing their concerns on the internal forum or to service agents. They try to avoid grey area words in chats, as they are afraid of getting caught by the algorithm and getting banned (Bucher et al., 2021). Gig workers often need to log the chat or the conversation summary on the platform as evidence in the event they get into a dispute or receive low ratings (Chan, 2022; Sutherland et al., 2020).

Furthermore, the algorithm has more control over gig workers who are dependent on the income that comes from it, as most of them cannot find other jobs. The control is the highest when they are in the matching process. Some platforms even warned customers and gig workers not to let conversations go off the platform after exchanging contact information, so the platform can monitor their conversations (Cameron & Rahman, 2022).

Customer roles

Customers or clients also play a big role in how gig workers experience the DLP, customer mistreatment leads to gig workers not getting the benefits they invested in the platform, which leads to gig workers finding their work meaningless (Xiongtao et al., 2021). Some customers are unpredictable, having unreasonable requests and expectations, while some customers give food deliverers low priority and let them wait extended amounts of time before giving them the food to deliver (Chan, 2022).

Monitoring of gig workers

What also frustrates gig workers is that some DLPs use apps to monitor their/the drivers' routes,

driving behaviour, speeding, harsh braking, and phone usage, contributing to safer driving and receiving better customer ratings. This also leads to privacy invasion of the drivers (Chan, 2022).

In former studies, most gig workers were afraid their accounts will get deactivated or getting kicked off the platform. The algorithmic system is also viewed as a black box (Rahman, 2021; Sutherland et al., 2020; Veen et al., 2020), as gig workers don't know how it operates and how rating systems use customer ratings to punish them. On the other hand, gig workers with a strong reputation and high ranking would experience less pressure toward work intensity and income security. They could also spend more on their well-being (Wood et al., 2019).

2.3. Conceptual Model

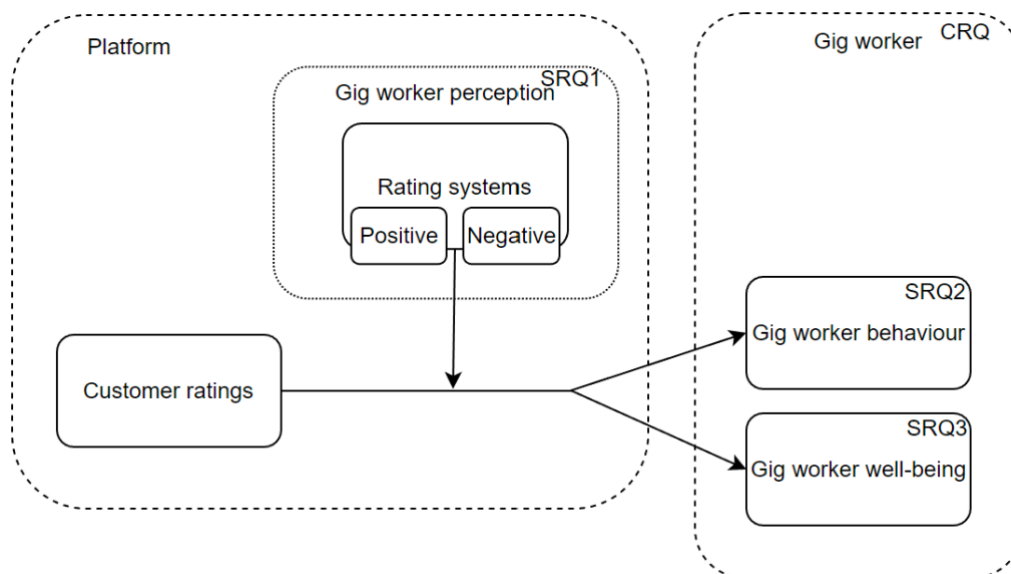
Using the literature themes, Figure 2 presents the conceptual model of the effect of customer ratings on gig worker behaviour and their well-being. The main findings in the literature review are caused by DLPs' algorithmic control paired with the rating systems. Also, the use of customer ratings to manage gig workers can lead to certain behaviour or reactions of gig workers and can influence their well-being. Gig workers perceive the synchronous nature of rating systems in a different way (SRQ1). What follows is the reaction that gig workers give when they get the rating and how it influences their behaviour and well-being (CRQ). Hence, the following three subquestions (SRQs) emerged from the literature review.

SRQ1: How do workers perceive the synchronous nature of the customer-gig worker rating systems?

SRQ2: How do customer-gig workers rating systems influence their behaviour and their work tasks?

SRQ3: How do customer ratings influence the well-being of gig workers?

Figure 2 Conceptual framework effect customer ratings on gig workers



This conceptual model presents my hypothesis that positive or negative ratings (SRQ2) impact the gig worker's behaviour, reaction, and well-being (SRQ3). Negative ratings cause negative behaviour, leading to negative reactions and a decrease in well-being, while positive ratings cause positive behaviour, leading to positive reactions and an increase in well-being. The next chapter describes the methodology applied to this study.

3. Methodology

This section provides substantiation for the empirical research, describing the research design in more detail. I explain the methodology used to answer the main and sub-research questions, and also highlight the reliability and ethical aspects of the research. Based on the novelty of this research, this research design was the most appropriate for this study.

3.1. Research design: selection of the research design

There are two approaches to research, a deductive and inductive approach. In the deductive approach, data collection is used to test or develop a theory. With induction, data collection is used to develop a theoretical explanation (Saunders et al., 2019). A quantitative-, qualitative- or mixed methods research approach can be used. Quantitative research focuses on collecting numeric data to measure the strength between different variables using questionnaires and statistics. Qualitative research focuses on collecting rich data from participants using data collection techniques such as interviews using open-ended semi-structured questions, and content analysis. Mixed method research combines both numerical data and non-numerical data for the research design (Saunders et al., 2019).

This study drew on an interpretive exploratory qualitative research approach starting with a literature review following Bosua and Dirksen (2022) 7-step procedure to review a selection of papers related to “gig worker”, “customer ratings”, and “consumer/gig worker behavior”. Once completed, empirical data collection and analysis followed using interviews as the primary data collection technique. Interviews are the most appropriate tool to use in exploratory research, where the structure is the same for every interview but can be deepened during the interview to let the conversation flow.

3.2. Case Study Description

The research was limited to The Netherlands, and following the literature review, I proceeded to select participants for this study. Since participant recruitment turned out an arduous task, I decided to focus on two DLPs that require the services of more experienced gig workers than those involved in the normal delivery of tasks, i.e., *Fiverr and Upwork* - two of the largest DLPs operating worldwide. Both allow customers to find gig workers who provide various services, like developers, (voice) actors, content development, and other similar services. These two chosen DLPs also operate in multiple countries around the world. Also, both platforms used algorithmic control systems to assign jobs to workers and to guarantee the quality of gig workers’ delivered services.

Participant (case) recruitment

Selection criteria for cases focused on experienced gig workers and worked for longer than 2 years on each platform. A work experience of two years was chosen as it was likely that these workers would have enough experience on the platforms. I began by posting messages on the social media platforms Facebook, LinkedIn, and Twitter to find interviewees who worked on Fiverr and Upwork. Additionally, I used the Tweakers and Reddit forums, posting an invitation-to-participate message, that contained the criteria gig workers had to comply with (see “Appendix 6 Messages posted on social media and forums”). After making contact, I verified if the participants’ complied with the selection criteria and if so, I requested an appointment to meet them virtually. I explained the research purpose and the interview, and what I will do with the data that I gathered from the

interviews. Before beginning the interview, I asked for their consent to audio/video record the interview.

Alongside the messages posted on social media, I created a Fiverr account to get in contact with gig workers. Although there were many Dutch gig workers, not many had 10 or more customer ratings. Furthermore, it was difficult to get in touch with the gig workers to interview them, as most of them did not have adequate time or did not want to participate in the interviews.

On Upwork, I signed up for an account as a client to get into contact with gig workers, which unfortunately did not work out as I could not message them directly. To find more possible interviewees, I posted messages on Twitter and Facebook using the hashtags: #Fiverr and #Upwork.

On LinkedIn I posted a message to pursue LinkedIn profiles to contact Upwork and Fiverr freelancers who lived in the Netherlands, provided IT-related gig work services on those platforms, and had experience of at least 1 year.

3.2.1. Participant details

7 participants agreed to participate in the study from the two different DLPs, Fiverr and Upwork. Table 1 outlines the cases, the pseudonym of each, platform they worked on, and average ratings. This selection of platforms also covered different categories of gig workers and by analysing this I could get deeper insights into similarities and differences in behaviour between gig workers.

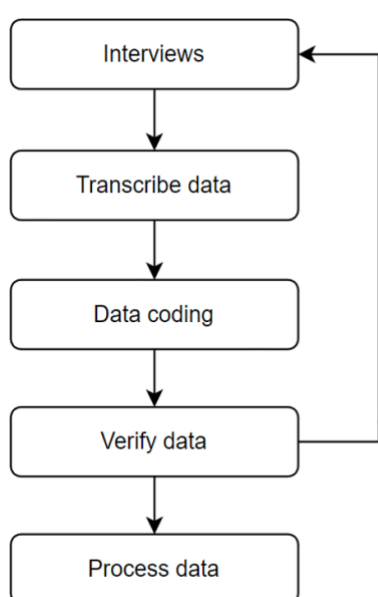
Table 1 - Interview participant details

Participant number & Pseudonym	Platform	Worker Average Rating
1. (Jacob)	Fiverr	5-stars
2. (Maarten)	Fiverr	5-stars
3. (Mike)	Fiverr	5-stars
4. (Helen)	Fiverr	5-stars
5. (Karel)	Fiverr	5-stars
6. (Koen)	Upwork	5-stars
7. (Kelly)	Fiverr	5-stars

3.3 Elaboration of the Research Method

Data collection and analysis comprised a sequence of steps with an elaboration of the techniques used in Figure 3 and the sections that follow.

Figure 3 Data collection and analysis process



Step 1. Interviewed the cases and audio recorded interviews. Searched and gathered relevant website data.

Step 2. Made a transcript of each interview and verified the transcript with the interviewee. Scraping and analysis of: gig worker ratings and feedback data, and customer ratings and feedback data.

Step 3. Analysed the interview transcript, gig worker and customer ratings data and feedback. Coded the transcript using different coding categories.

Step 4. Verified the interview, ratings and feedback data.

Step 5. Analysed and searched for relations within the identified categories to cluster data into higher groupings.

3.2.2. Data Collection and Analysis (steps 1 to 5)

The following techniques were used to collect data on worker perceptions of algorithmic rating systems and their impact on themselves and their well-being:

- i) *Individual one-on-one semi-structured interviews:* comprised the primary data collection instrument collecting semi-structured data through interviews with all participants (Saunders et al., 2019). Before the interview, I clarified the goal of this research was and confirmed I will not use the data for purposes other than this research. The data was anonymised, kept only for this research and used in such a way that it could not be linked back to the interviewee. After interviewing the first interviewee, I concluded that a few interview questions had to be refined/joined together because responses to questions were already given in earlier questions. Hence the first interview was worthwhile to refine the interview protocol. Each interview took maximum 40 minutes, and when some subjects were still vague upon interviewing them, the interviewee was approached for a follow-up interview. The themes used to create the interview questions are enclosed in Appendix 5 Interview themes.

7 gig workers were eventually interviewed to gain sufficient understanding of the effect of customer behaviour and reactions of gig workers. Where possible, observations of gig workers were recorded and also coded.

- ii) *Transcript of the interviews:* Interview data were transcribed and afterwards checked for errors in the transcripts. Recordings and transcripts were added to the qualitative analysis tool ATLAS.ti, for coding.
Scraping of ratings and feedback data from the Fiverr website: I scraped data from the Fiverr website consisting of the following:

- Data of 10 gig workers in the Netherlands were accessed to gather ratings and feedback that were given to gig workers and specific words most used in their feedback. The selection criteria to access the ratings of the various gig workers were:
 - each worker had to have at least 100 ratings, and
 - ratings had to be given in the past two years (2021-2022).
 - Data from 11 gig workers and 22 customers were collected with the following selection criteria:
 - Discrepancy of the stars and/or feedback given, and
 - At least 20 ratings.
- iii) *Analysing the data*: The gig workers' and customers' ratings data and feedback were added to a spreadsheet to analyse the data. A Word cloud was generated while excluding common stop-words to analyse the most commonly-used words of both the customer and the gig worker.
- iv) *Verifying the data*: Following coding, the data was verified and when new topics were brought up, these were included in subsequent interviews to compare the results on that subject. In case new topics were derived after interviews were already conducted, the previous interviewees were contacted to collect more data from them, see Figure 3.
- v) *Clustering of the codes*: Codes were analysed and where possible, grouped into a higher code group *Appendix 10 Coding structure*. Code groups were analysed and related to the derived themes.

The aim of gathering this data was to get a deeper understanding of the algorithmic rating systems of Fiverr and the various ratings that gig workers and customers gave each other and the effect of these ratings on gig worker behaviour and their wellbeing.

3.3. Data Analysis

All interviews were transcribed using *Amberscript Machine-Made Transcriptions or Whisper* which uses AI to transcribe the interview audio file. I went through the whole transcript multiple times to verify the correctness and completeness of the transcript and filled gaps where necessary. The transcript was uploaded to ATLAS.ti for coding purposes.

The data analysis process followed and feedback was gathered from the platform's website, see section 4.2. Interview transcripts required checking to omit stop words like "uh", "euhm", "eh", "hé", "mja", "o", "ja, ja", for the analysis.

To better understand the feedback given to gig workers, 50 sets of rating feedback data was collected from 10 gig workers. The data was translated from Dutch to English where necessary using DeepL. I filtered out meaningless words such as 'a', 'and', 'all', 'as', and corrected Grammar mistakes. Synonymous words were grouped as one word, such as 'deliver' and 'delivered' or 'thanks' and 'thank you', and usernames of gig workers were also omitted.

Coding of the data drew on the analytical techniques and coding method of the Grounded Theory Method of Strauss and Corbin (1997):

- Open coding: whereby collected data was broken down into parts related to ratings, feedback, gig worker behaviour, gig worker well-being and then coded with a label, that was also used for similar parts coded in the interview.
- Axial Coding: different coded parts were clustered together into categories that showed the sub-elements of each cluster or category. A comparison of clusters was followed to explore the relations between categories to explain one or more phenomena and their relationships.
- Selective coding: Principal categories and related subcategories were developed based on the associations that existed between coding categories. In this stage the central category became known and how the other categories were related to the central category.

3.4. Validity, Reliability and Ethical aspects of the study

In this section, I provide details of how the research design, validity, reliability, and ethics were supported.

Reliability

Reliability refers to whether questions in the interview were interpreted in the same way, and whether the definitions were the same as one interpreted them when the questions were compiled and asked in the interview. The interviews had been recorded, where interviewees gave their consent and were made available upon request. Multiple cases were selected and the work was discussed with the supervisor. Saturation was reached after a minimum of two interviewees gave the same answers. Pseudonyms were used together with organisation names in the findings to reassure the interviewees. The transcripts had been shared with whom it was desired, to verify the data and see if participants were happy with the results. Furthermore, the transcript had been coded independently with the supervisor to see if the data has been interpreted reliably.

Validity

In qualitative research there are three types of validity applicable; internal validity, external validity and construct validity. Internal validity refers to whether the findings measured what you intended to measure. External validity refers to whether the findings could be generalised to other relevant contexts. Construct validity refers to the extent to which your measurement measured the construct you intended to measure (Saunders et al., 2019).

To support internal validity, this research followed a clearly outlined methodology and empirical data was collected to validate causal relationships. Causal relationships were tested to verify if some other possible conclusions or causes might have produced these results. To reduce possible bias, questions have been added to the interview to verify the definitions used in the interviews.

To support external validity, this research chose multiple interviewees in the same organisation and at least two organisations working in the same platform category. As the research had taken place in The Netherlands, the generalisability might be limited, although the selected organisations operated internationally.

To support construct validity, the interview questions were designed in a logical structure with the derived themes of the literature research. The questions had been organised around categories which would further reduce the bias. The selected interviewees were the ones whose effect would be researched and who had the right experience to answer the question.

Ethical aspects

This research was conducted under the Netherlands Code of Conduct for Research Integrity 2018 (Algra et al., 2018). The researcher was independent, not employed by any of the case organisations and there is no relationship in any way with those organisations. The researcher did not receive any benefits for conducting this research. It was clear and transparent how the data had been obtained, and the data of the interviewees had been anonymised to ensure their privacy. The researcher had analysed the data objectively and honestly, and had taken alternative opinions seriously. Before the interview began the researcher will explain the project, after the interview had ended the transcript of the interviews would be shared with the interviewees, who desired it, to confirm the information given was correct. The researcher would minimise the impact on the interviewee's work, by anonymising the data and interviewing the gig worker after working hours. Data that had been gathered on forums and websites have also been anonymised to ensure the privacy of those people. The data collected through interviews will be stored securely and retained for a minimum of 5 years.

4. Findings

Chapter 3 explains the research methodology, the data collection and analysis, and the participants' selection criteria for this research. In this chapter, I present an in-depth analysis of the gig work platform Fiverr and the themes found after coding and analysing the data.

4.1. Benefits and drawbacks of DLPs using algorithmic rating systems

The Fiverr platform attracts many workers who like the platform's benefits. At the same time, workers also accept the drawbacks of this platform, as outlined below. Note that Fiverr uses the terms 'ratings', 'reviews', and 'grades' to refer to the number of stars and feedback given to a worker.

4.1.1. Advantages/benefits of DLPs

According to the participants, Fiverr's rating system works quite well when you earn high ratings. Your rating level will increase with higher ratings and you will gain more visibility when clients are searching in the category you are classified in. The higher the gig worker's rating level, the more you will stand out and the higher price you can ask for the same gig work. As multiple participants said:

Yes, the higher, the better your reviews are and the more stars you have, the higher you get on the first page, so to speak. (Helen, Fiverr).

Okay, I'm a level 1 seller now, and then later when you've earned 2,000 euros on a platform, you go to level 2. And so, then you also have to have a certain inbox response rate. And be on a platform for a number of days (Karel, Fiverr).

And well, you then notice that [positive ratings] just did have an effect, so you also receive multiple orders (Jacob, Fiverr).

The platforms serve a large range of customers in different countries all over the world, people from Asia or America can contact you for your provided services. A lot of positive ratings will win over potential customers looking for services they cannot find someone to do or that are too expensive within their region. Most gig workers find their work flexible and diverse, and can expand their expertise.

4.1.2. Disadvantages/drawbacks of DLPs

Although DLPs have multiple benefits, there are also drawbacks. The rating system of Fiverr is mainly focused on the client (buyer) and tough on the gig worker (seller). The client is protected by different sorts of rules as opposed to the gig worker, who can only rate the client if the client has already given his/her rating. When the client gives the gig worker an unjustified rating, the gig worker cannot discuss or appeal this rating, meaning they can only accept this and work harder to earn higher ratings, where a minimum average rating of 4.7 is acceptable to stay in the same level or get promoted (Fiverr, 2023c). Another issue is that the gig worker cannot take free time and pause his account, as Fiverr has a rule which penalizes a gig worker when their account has been paused for more than 30 days within a year. The account will become inactive, the gets demoted, and gets a setback of being promoted when searched, as a penalty. Furthermore, other accounts within the same category will be promoted more or get higher in rankings. Gig workers feel the rating system is a black box with opaque and unfavourable rules for them.

The platforms are also not personal, it's just a tool to match customers with gig workers - there is no interaction with the persons behind the platform according to a participant:

You're also kind of in an 'algorithm' I notice. So, Fiverr itself is not very personal. Yes, you basically work for a tool I understand, do you understand what I mean? It's all very automated (Jacob, Fiverr).

Another thing gig workers mentioned is that the customer ratings are not relevant any more when you have a lot of positive ratings, the positive ratings will even out the somewhat lower ratings so it has no impact on the average of the ratings:

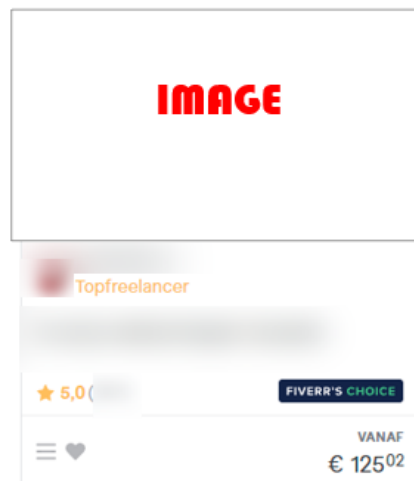
Well, the consequence [of a negative rating] isn't that big I guess, because I have quite a lot of positive reviews (Jacob, Fiverr).

But yes, I have quite a few reviews and of course the more you have, if there are some less good ones, which of course can happen, then it doesn't have much influence [on my overall rating] (Kelly, Fiverr).

4.2. Ratings between the seller and buyer

The ratings only have an impact on the gig worker's searchability, seller level, and promotion of the gig worker. When looking up a gig worker, their average rating and the number of ratings are shown prominently close to their name. As seen in Figure 4, the seller level is 'Topfreelancer' with an average rating of 5 stars and being promoted as a Fiverr's choice (Fiverr, 2023b).

Figure 4 Gig worker example with seller level, average rating and promotion



4.2.1. The Process of Rating systems

The rating systems where the customer can rate the gig worker are not equal to the rating between the customer and the gig worker. The only way a gig worker can rate a customer is when the customer rates the gig worker first. The gig worker cannot see their given rating when the gig worker does not give a rating, which makes it more unequal, as four gig workers said:

So, suppose someone doesn't rate you, then you can't rate the other side either. (Maarten, Fiverr).

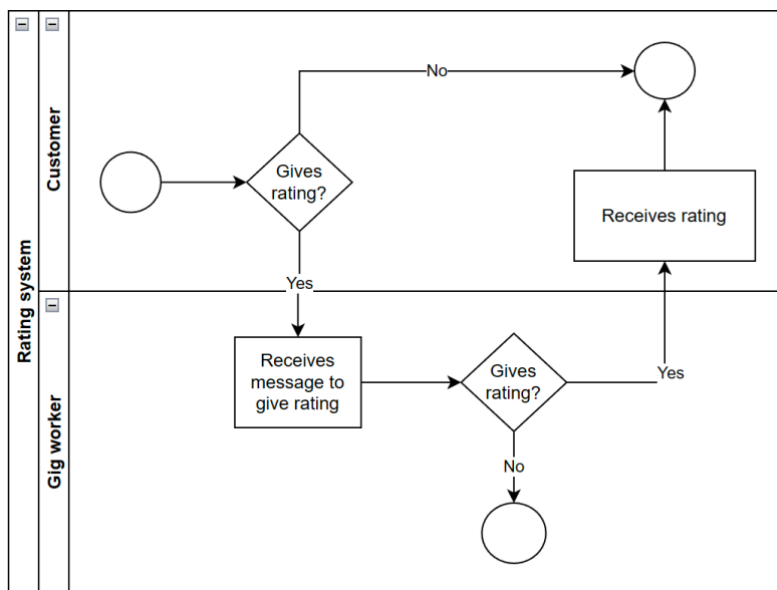
Well, it goes like this: you complete an order, that's what they call delivery. Well, then that will be accepted by the customer if all goes well and then you will receive a message like 'the customer has left you a review', but you don't have that yet. They don't show them yet and then you can write a review for the customers first. And then you get to see the customer's review. (Jacob, Fiverr).

And if they don't leave a review, you will never have the chance to write a review about them either. (Karel, Fiverr).

I don't get to see my own review if I don't rate it. So vice versa, of course, the same is true, if the customer doesn't rate me, they don't get to see my rating either. (Kelly, Fiverr).

After the gig worker has finished the gig and the customer has marked the order as “completed”, the customer gets a notification to rate the gig worker. The customer can choose to rate the gig worker or not. If the customer rates the gig worker, the gig worker will receive a notification to rate the customer then. The gig worker can choose to rate the customer or not, and if he chooses to rate the customer, the customer will receive the rating. The rating of the gig worker will be published, only when the gig worker also chooses to rate the customer or when the period of two weeks has passed (Fiverr, 2023a).

Figure 5 Rating process between customer and gig worker



4.2.2. Most used words in feedback gig worker

The 10 gig workers and their 50 most recent ratings with feedback on the Fiverr website were analysed, see Appendix 7 Customer feedback given to gig workers. In Figure 6 the words ‘Very’, ‘Work’, ‘Fast’, ‘Great’ and ‘Voice’ were the 5 most used words in the feedback.

Below are a few examples of those words used in the feedback:

Thank You :) (Gig worker, Fiverr).

Great Experience!!! (Gig worker, Fiverr).

Always a pleasure to work with you. Thank you! (Gig worker, Fiverr).

The same can be concluded with the feedback given by the gig workers to the customers. The words used do not give any meaningful feedback as to what the customer could have done better.

4.2.4. Correlation between ratings given by customers and gig workers

When I looked at the ratings given by customers to gig workers and the ratings given by the gig workers to the same customer, as seen in Appendix 9 Average ratings gig workers and customers, we can see quite a large difference. Most gig workers will give a 5-star to the customer, while the customer gives them less than 5 (i.e., between 1 and 5) stars.

Table 3: Ratings given to gig workers by customers (total of 23 ratings)

Rating in stars	Quantity given
5	0
4	19
3	2
2	1
1	1
Average stars	3,7

Note. The ratings can be given with one decimal place, here the stars were rounded to the nearest integer. For e.g. a 3,4 or lower has been rounded to a 3, a 3,5 or higher has been rounded to a 4.

Table 4: Ratings given to customers by gig workers (total of 23 ratings)

Rating in stars	Quantity given
5	21
4	1
3	0
2	0
1	1
Average stars	4,8

4.3. Reasons for moving to a DLP

The participants gave various reasons to work on DLPs. One is to get an extra income and the second is to grow their knowledge and expertise. 2 out of the 7 participants have gig work as their primary income. The other 5 participants have it as a secondary income, but some also use gig work to train and hone their skills:

And Fiverr ... Yes, that's also very coincidental in fact, because I was looking, you know, I'm relatively old of course. So, I actually wanted to do some kind of internship somewhere, but I was actually doing that. Then I saw Fiverr and I made an account and to my surprise, the orders started coming in and that kept getting bigger and bigger. (Jacob, Fiverr).

And then he [a colleague] was like, well, you actually have a pretty good voice-over voice. Do you do something more with it? Then I thought, no, actually not. And so I started looking for,

okay, what are the possibilities? What should be possible for it? Where can I end up? Well, then I stumbled upon Fiverr. (Kelly, Fiverr).

I once registered for that in 2010 when I started my own company, so from there I might be able to get assignments. (Koen, Upwork).

Before working on the DLP, participants all had different backgrounds in work experience and knowledge. One participant followed online retraining to find work in a field he did not have experience in. Another participant used the skills and knowledge he has obtained while working for a company previously, while others used skills and knowledge from their current job:

Yes, because yes, I couldn't program and actually got into it a bit by accident. First, I was doing statistical models and then did some programming and I really liked that. Yes, I obviously didn't do any official training, I did everything through what's called online training, like Coursera, Udemy and things like that. So, what did I actually learn? I just learned basic programming with C and Java, and then I added JavaScript and stuff like that. (Jacob, Fiverr).

And R-Table was a software that you can actually build all sorts of things with and I found that quite interesting, fascinating. I started messing around with that a bit when I was back there [a company] and left. Eventually, I got back to how it worked a little bit and yeah, I was pretty much just sitting the potential of what you can do with it all. (Karel, Fiverr).

Yes, so I already had a basic knowledge of R-skill, I didn't want to lose that because at work I use Python and besides that I wanted to develop my existing skill as well. (Mike, Fiverr).

4.4. Experience and strategies dealing with DLPs

Skilled gig workers see themselves more as entrepreneurs who have customers and try their best to maintain a good relationship with their customers. They often ask for feedback in between the gig work they are given by the customer, and try to change their behaviour or attitude to adapt to each customer's demands. In the beginning, they often work harder for a much lower price, asking 5 or 10 euro for gig work:

Hey, so in the beginning I started very low with my prices, I also started with ten dollars. (Maarten, Fiverr).

So that started very small, with people getting stuck with homework, until I'm doing pretty big jobs now, so that's it. (Jacob, Fiverr).

They would deliver their gig work well within the timeframe, spend much more time on multiple gigs and even deliver more work than they initially agreed to with the customer. Something else was being flexible with the customer, which means they will need to accommodate the customers' needs. When the customer lives in another time zone and organises a meeting, they will need to join the meeting even if it means they need to join it at 11 p.m. or worse, at times after midnight:

You can receive orders at the craziest times and it is possible that you are suddenly working on Saturday or Sunday and sometimes you have to be very concentrated on work. So I need to sit separately in a room, in an office. In that way, this is clearly not a nine-to-five job. (Jacob, Fiverr).

That's also a bit weird, the Indian time. They don't have winter time. (Jacob, Fiverr).

Well, 2020 has, above all, impacted my family life, but my family understood very well that I also worked over weekends on the platform, or to build-up a reputation. (Maarten, Fiverr).

What is very annoying is if you are indeed put under pressure by a client at times when it really does not suit you. And that is sometimes very difficult because the distance [between the gig worker and the customer] is too large. (Koen, Upwork).

Although the platform was convenient to get access to gig work and customers, most gig workers found the service fee of the platform quite high. On Fiverr, it's 20% of the invoice you charge for the gig work, and also on Upwork. Gig workers work around this by contacting customers they have worked together with previously outside the platform. In that way, they will directly charge the customers for their gig work and they will get the full payment without any service fees:

And they found me through Fiverr. We made an appointment through Fiverr. And then they called and found my number on LinkedIn. And they called them and said, can't we do a deal like that? Yes, we can. It doesn't necessarily have to be through Fiverr. (Helen, Fiverr).

And I have, for example, a job in India that's been running for almost six months now. Well, you don't actually do that through Fiverr anymore, so you're actually employed directly now. (Jacob, Fiverr).

That is why I myself am inclined, if at all possible when you have a good client, you soon become very involved with each other. And then you actually soon get into a conversation about what one wants from the order. And yes, then indelibly you get in touch in a way other than through Upwork. And then there is actually the moment when you say hey, according to their rules it's not allowed. But you then start looking at whether you can engage in another type of contract with such a client. (Koen, Upwork).

4.5. Response to customer ratings

Customer ratings play a crucial part in influencing the gig worker's profile, with the stars given are used in the algorithm to manage gig worker's visibility, searchability, and levels and indirectly influence the chances the gig workers will be contacted for gig work by customers.

Yes, it [the rating] has consequences for the impressions and findability of me as a provider of services. (Mike, Fiverr).

But on the other hand, you also want customers to see that you deliver value for money, so a good review is essential. A 5, the score is essential, you want the customer to write something about it, and for another buyer to benefit from it and they really look at it. (Maarten, Fiverr).

Well, the higher, and the more reviews you have, the better it is. And the higher the score, the better, of course. And the levels, at Fiverr for example you can get levels, so level 1 to top-seller I think it is. That is also very much based on the reviews and the number of assignments you have and the amount. But reviews are certainly part of that. So, if you have bad reviews or you cancel an appointment, your rates will go down immediately. Not as in the amount for which you offer your service, but your response rate drops. The on-time delivery segment is dropping. (Helen, Fiverr).

You can have certain levels [seller levels] if you sell more, have better reviews, and then suddenly you can be put back two levels due to a trifle and then you notice that it all works from a kind of algorithm. (Jacob, Fiverr).

They feel anxious and did not have much self-confidence when they just started with gig work, this resulted in a lower price, working more and harder than when they were working at a 'normal' job, and pleasing the customers by delivering more tasks than necessary or accepting bigger jobs than was known at the start. The anxiousness was primarily caused by the high standard they have set on the ratings, you almost need to get five stars on every rating or you will drop in level. For beginners, it's a high barrier to be and stay on that level, especially when gig work is their primary income:

In the beginning, you really wanted to, you were very focused on getting a good rating, because I knew well that's important for your reputation and that's a bit more nuanced [less influence] now. (Jacob, Fiverr).

So, I thought, well, I'll just have to take what I can get unless it was really weird requests or something, but you don't get that very much. But yes, then you take ... (Helen, Fiverr).

Yes, I certainly did in the beginning [pleasing the customer]. (Koen, Upwork).

In the beginning, I took everything [orders]. And I really have done very large orders for a low price. Purely to bring in orders and reviews, because I was actually aware at the time that a start had to be made. (Mike, Fiverr).

The gig workers with a primary income next to gig work will have less anxiety as they still have another income they can fall back on if working on the DLP does not work out. The same goes for gig workers who have been working longer on the platform:

If it was a full-time job, I think it would be much worse. And work much harder to really get only very positive reviews. But now it's just actually the nice extra income next to it. (Kelly, Fiverr)

In any case, I point it [additional work] out. And depending on how much more work it is, I'm doing an assessment and I'm going to split it into two parts. And I will receive a new quote. I'm quite business like that. So basically, I don't do any extra work to get a better review. (Mike, Fiverr).

In the beginning I was still nervous before reviews, but not anymore. No. (Jacob, Fiverr).

Yes, my acceptance rate has decreased in that. As soon as people start asking for more than in the initial order state, I cut it off much faster now. (Koen, Upwork).

Maybe a little more careful after that, but... Yes, then, if I think about it now... How... But I can say, yes... There are 29 good reviews. In one bad... Or only four stars. And one bad... Yeah, what do we fuss about, you know. So, I can relate to it. (Karel, Fiverr).

4.6. Dealing with ratings and feedback

Then you have the unjustified ratings, where the customers' demands were not fulfilled. One gig worker had varying results when opening a dispute after an unjustified rating and a customer who did not want pay.

Yes, and that [the rating] can be changed but that is really a tedious process. It is very difficult to get people to do that. It did work once with a client who had said really nasty things in a chat about it. (Koen, Upwork).

Others find the platform opaque and also do not know how to open a dispute against an unjustified rating.

Nothing else at all, no, because you don't feel like you can do anything about it. I think you can write a review once and that's it. You cannot protest. (Jacob, Fiverr).

You can't do anything about it and you can't comment against it either. Yes, you really can't do anything. (Maarten, Fiverr).

Whether it is possible, I don't really know. I haven't had it [an unjustified rating] that often. (Kelly, Fiverr).

The ratings can bring up emotions that gig workers have to deal with in their private time. Gig workers all work from home and do not have a company doctor or confidential adviser to turn to when they experience emotions caused by ratings. The gig workers have different ways to deal with their emotions when getting negative ratings or when they feel stressed because of the gig work they accepted:

Negative ones [ratings] we just click away. Then we say, hup, red cross and away with it. And then we don't look at it anymore. And then go out and play with my little boy and the day is much more fun than a stupid review like that anyway. (Helen, Fiverr).

Because in the beginning, it was still very often that I thought okay, but I'm just getting started. So, I shouldn't be hard on myself either. (Kelly, Fiverr).

Well, when I'm stressed, I usually just sit separately, because then I just notice that I'm less cosy with the rest of my family. (Jacob, Fiverr).

To take that stress away. The way I deal with it is that I get that order right and get rid of it. That's actually more about tackling the problem. (Mike, Fiverr).

4.7. Strategies to get high/positive ratings

As stated in section 4.5, customer ratings fulfil a crucial role in influencing a gig worker's profile. Gig workers themselves have thought of different ways and strategies, to influence rating systems. Each of them has different ways to influence customer rating:

Hey, so I offer 'no cure, no pay', that's 100 percent customer satisfaction. If you're not satisfied, we will cancel the order. And a happy side effect of that is that the customer can't rate you either, so then you can't get a negative review either. (Maarten, Fiverr).

Yes, it's [the gig work] just clearly framed. What do you expect? What do you want? And what can I do for you? And be realistic about that. As long as you are realistic in the customer's expectations. (Helen, Fiverr)

I'm just trying to do the preliminary work. To hear if this is going in the right direction. Is the customer satisfied? OK, great. Only then will we really start that gig. (Karel, Fiverr).

Yes, in the sense that I work with revisions and only agree or say, only accept the delivery when you are really satisfied. (Mike, Fiverr).

I think that's also because you work very intensively with such a customer to ensure that the order can be carried out properly. That is inherent to the type of work I do. You have to have a lot of traction to make sure it goes well. (Koen, Upwork).

Some gig workers offer 'no cure, no pay', while some focus on doing preliminary work to verify the customers' demands. As seen in the data, there is not one set of strategies to use to get the highest possible rating, it depends on the type of work and the field of work which the gig work is in.

5. Discussion, Conclusion and Recommendations

This chapter contains a discussion of the outcomes, how research findings fit into the body of existing knowledge and what may be inferred from them. The study's research recommendations are also mentioned here, along with some academic recommendations of and describing the academic and practical implications of this study.

5.1. Discussion – reflection

To answer the central question, I will first answer the sub-research questions (SRQ1, SRQ2 and SRQ3), followed by the central research question (CRQ). After that, I will present the conclusions of this research, recommendations for practice, and further research.

5.1.1. SRQ1: How do workers perceive the synchronous nature of the customer-gig worker rating systems?

From the gig workers' perspective, the rating systems have various flaws in them, which made working on the DLP quite challenging and impacted their well-being.

I. Perceived unfairness of digital labour system

DLPs are not fair for new workers, even my participants told me they were not sure how rating systems work. It is explained on the website, but in their perception, it is not very transparent. This creates an unbalanced rating system. Furthermore, 6 out of 7 gig workers did not know how to dispute an unfair rating. The one who did know how to dispute an unfair rating worked on another platform (Upwork), but had varying results. The same results can be found in another study (Cameron & Rahman, 2022), where the gig workers voiced out the dispute mechanism were in favour of the customers. Rating systems are not focussing on fairness, new workers and 5 out of 7 participants do not know how rating systems work.

Proposition 1a: *DLPs have unfair customer-gig worker rating systems, which impact the worker's well-being negatively during the first stages of working for the platform.*

II. Transparency rating systems

The rating system does not tell the worker he cannot rate synchronously, it is confusing in the beginning (also the same on Upwork). This also does not give the same advantage to both parties. In the beginning, there is a level of anxiety in the worker, where the worker gives a high rating to the customer in the expectation, he gets a high rating the next time. Even though explained on the website, it is not the way they experienced this, 5 out of 7 workers were unhappy with this arrangement. DLPs should explain more to the workers. The system is not open and transparent enough.

Proposition 1b: *DLPS need to be much more specific in the rating methods used by their platform to lower anxiety and create a higher level of well-being for new workers.*

5.1.2. SRQ2: How do customer-gig workers rating systems influence their behaviour and their work tasks?

DLPs use algorithms to manage gig workers by mainly using rating systems to let the customers rate gig workers, and vice versa. Other factors include response rate, order completion rate, on-time delivery score and received no warnings over the past few days. These factors change the behaviour of the workers in various ways.

I. Gig workers' feedback demand

Gig workers want continuous feedback on the tasks they are working on, this is unusual for a normal working environment. In a normal working environment, you have specific moments every year you talk to your boss to look back at the past period to see what went well and what can be improved. In the DLP, the platform is between the gig worker and the customer, acting as a mediating element. The platform makes it hard for the worker, there are no frequent times when you could really call a manager and speak to him physically. They were not verbally praised for their work and if they were not praised they would know their work is not going very well.

Proposition 2a: *Constant and immediate feedback on the request of a gig worker was a necessity in this environment to increase the level of well-being.*

II. Low rates and hard work

Gig workers see themselves more as entrepreneurs who have customers, whom they try at all costs to maintain a good relationship with (Ravenelle, 2019). In the beginning, they would often work harder for a much lower price (€5 or €10 euro) for their offered gigs. They would deliver their gigs well within time and spend much more time working on multiple gigs and even deliver more work than initially agreed with their customers. Also, they are flexible with customers, which means they need to accommodate customer needs. When the customer lives in another time zone and organise meetings, they will join the meeting even if it means they need to join at 11 o'clock in the evening, or after midnight. Rates initially started low, but increased the more confidence they gained (Ravenelle, 2019). Eventually, over time they could ask for much higher rates, which made them happier and increase their well-being.

Proposition 2b: *Low rates seem to be a necessity to attract customers, which in turn as gig workers gain customer ratings eventually lead to higher rates for the same gig.*

III. Experienced workers

After working on the platform and having experienced the impact of the rating system, gig workers tend to look at ways to get more money out of the gigs. The service fees and rating systems have led gig workers to look for other ways to bypass them. Some use the video conferences provided by the platform to redirect the customer to initiate the gig outside of the platform, by giving their contact information or social media account. That way they can bypass the service fees of the platforms. Gig workers use their built-up network on a DLP to continue their work off-platform (Sutherland et al., 2020). This led to a higher sense of happiness as the gig workers earned much more without paying the 20% service fees to the platforms.

Proposition 2c: *The high service fees of the platform made the gig workers start looking for other ways to bypass the service fees.*

IV. Behavioural changes

Depending on their field of expertise or offered gig work, their behaviour is changed differently. One gig worker did preliminary work before accepting the gig of the customers, they showed their preliminary work to the customers first. He also made sure his work was made on his own infrastructure or servers and asked for feedback before delivering the gig officially. That way the customer cannot reject his work while asking for additional work in the same gig without paying for it. Another gig worker who works as a virtual assistant, adapted to the customers' demands and believes in the customer being king, while continuously aligning with the customer's needs. And one

gig worker cancels orders if they do not match the customer's original description to avoid a negative rating, the same strategy workers used in a study by Cameron and Rahman (2022).

Proposition 2d: *Customer-gig worker rating systems change the gig worker's behaviour, with workers using various strategies to get or maintain a high rating.*

5.1.3. SRQ3: How do customer ratings influence the well-being of gig workers?

With the flexibility of time to spend on gig work, there are also downsides to worker well-being in this study. Workers used their evenings/weekends to finish the work they were assigned. The app was 'always' on, requiring an immediate response in a set time (response time) to avoid demotion to a lower level.

I. Accommodating various customer factors

Two gig workers tried to accommodate customers' needs, even when it was unreasonable at times. When working with customers in another time zone, they adjusted their working schedule to fit their customers', which in turn impacted their personal lives and well-being. This was also the case in two other studies (Aleksynska et al., 2019; Cameron & Rahman, 2022), where gig workers accommodated customers to work at the same times as their customers while they were in different time zones.

All gig workers changed once they received positive reviews and had more experience on the platform. They considered their well-being when accepting new gig work. They would communicate and set boundaries in the work they deliver, schedule free time over weekends, and take holidays when they did not have any ongoing gig work. Depending if the rating was positive or negative it influenced gig workers differently. The moment they received a positive rating, they felt happy and received a major confidence boost. They shared their joy with their spouses. The moment they received a negative rating, they felt sad, especially when the rating was unjustified. Some even get angry, but they knew they could not do anything about it.

But as workers became more experienced and received a rather large quantity of ratings, low ratings did not matter as much. Workers knew their average rating did not change that much with one negative rating. The average ratings and gig workers' levels are recalculated each month, so they know they just have to wait a few weeks to be back on the same level.

Proposition 3a: *Initial low-level customer ratings negatively impacted new gig workers' well-being, but over time forced them to work harder, to increase their experience which ultimately increased customer-gig ratings.*

II. Bypass the DLP

After working on the platform and having experienced the impact of the rating system, gig workers tend to look at ways to get more money out of the gigs. The service fees and the rating system leads gig workers to look for other ways to bypass it. Some use video conferences provided by the platform to redirect the customer to initiate the gig outside of the platform, by giving their contact information or social media account. That way they do not have to pay the service fees on the DLP.

Proposition 3b: *High service fees cause gig workers to use inventive ways to earn money outside of DLPs.*

5.1.4. CRQ: What is the effect of DLP customer-gig worker ratings on the working behaviour and well-being of gig workers?

The rating systems are unbalanced, and the customers are better protected than the gig workers. The rating systems give customers the option to rate the gig workers first without letting the gig workers see what ratings they get. The gig workers mostly rate a 5-star with the expectation they also got a high rating from the customers. Especially in the early stages of their experience on DLPs, gig workers are anxious about receiving ratings as they don't have many ratings yet. While over time they get used to it and they have built up enough high ratings to not let a low rating affects their ratings average.

Gig workers need rating systems to enhance their level on the platform, which impacts their visibility and findability on the platforms. The ratings also give potential customers an impression of the worker which might win over a customer to order gigs. Positive ratings will give workers a boost in their confidence and increase their well-being, while negative ratings will make them insecure and decrease their well-being. They might get disappointed in their abilities, be mad at themselves and need time to process the anger.

At the same time, ratings influence the gig workers' mindset on how to attract customers and work with customers. They use various tactics to feel if there is a match in the personality with the customer, how to meet his expectations and level with them. And deliver the right work they expect them to deliver. Gig workers will try to manage the expectations in the first dialogue with the potential customer so they can specify and frame what will be delivered. By managing the expectations of the customer and making agreements on the deliverables at the first contact, they will be able to deliver the right product or service and get a positive rating and pleasant collaboration with the customer.

Proposition 4a: *DLPs should be more open and transparent and support new gig workers to understand how platforms and their rating systems work.*

5.2. Conclusions

As the findings suggest, some of the rating systems on algorithmic controlled DLPs such as Fiverr, are still a black box. All gig workers mentioned in a way that they did not know how the ratings worked and why the ratings only affect them and not the customers. The gig workers also voiced their dissatisfaction with the high service fees on the platforms, they in one way or another have used methods to sell their gigs to the same customer outside of the DLP while the contact was initially made on the DLP. Some use videoconferencing tools to give their contact information, others use social media tools to present a way for customers to contact them. Although algorithmic platforms bring many drawbacks, especially rating systems, they also bring many advantages. They come in contact with customers who are interested in a longer customer-seller relationship outside of the DLP and built up a network of customers who initially ordered their gigs.

The rating systems have a short-term effect on gig worker's well-being, they felt anxious and stressed in the beginning, adapted to customers' demand to work on times according to other time zones or worked at weekends to deliver the gigs faster. This resulted in a decrease in their well-being. After experiencing many gigs, customers and customer ratings, they care less about the ratings but at the same time are forced in a way to get intermediate feedback to continuously check if the gig is according to the customers' demands. That way the gig worker can meet the expectations of the customer, and have a higher chance of getting a 5-star rating after the customer has accepted the gig. This leads to less stress and anxiety about the gig getting rejected and

increases their well-being. With getting fewer rejections and revisions, they can plan more spare time at weekends and holidays, which increases their well-being as well.

5.3. Implications of the study

5.3.1. Implication for research

The study made a good start to show the discrepancies and imbalances of algorithmic rating systems. Since DLP work will increase, the negative aspects of algorithmic rating systems need to be eliminated through the setting of minimum standards algorithmic rating systems should adhere to. Advertisements on DLPs need to explicitly address how the algorithmic rating system works from both a customer and gig worker perspective.

The study was small and should be extended to a larger scale and more countries. The follow-up study should be a larger study that combines qualitative and quantitative research. A more comprehensive quantitative study is required to measure the strength of ratings and algorithmic rating systems on DLPs is required.

5.3.2. Implications for practice

This study made some recommendations to improve the balance between the gig worker and the customer. It also confirms the need for a better balance on the DLP between the power of the customer and the worker, the current rating systems give the customer more advantages to move the worker to his liking. The high service fees, which has been mentioned in this study and multiple other studies, are also a thorn in the side of the gig worker.

DLP owners should use the findings in this research to improve the balance of their platform and be more considerate how it impacts the well-being of workers. The high service fees should also be adjusted to a more suitable way which has less impact on the worker'.

The workers on the other hand can use the findings in this study to find suitable ways to improve their ratings, position and their well-being.

And lastly, customers can use the findings in this study to be aware of the high ratings standard the platform has.

5.4. Limitations of this research

This research has been held in The Netherlands, and mostly with gig workers working on Fiverr. The following limitations apply to this research:

- I. The laws and culture in The Netherlands might differ from other countries.
- II. The rating system of the platform Fiverr has been chosen as the case for this research, which limits the generalisability of this research for all DLPs, although most platforms use similar algorithms.
- III. The interviews were held using 'Zoom', so I could not observe the participants.
- IV. Due to the limited time, it was not possible to collect/scrape a larger pool of rating data between the customer and the gig worker. With a larger data pool, the discrepancy of stars given between the customer and the worker would be more accurate.

5.5. Recommendations for further research

For a broader perspective of the effects of customer ratings on the behaviour of gig workers, other countries in the world should also be taken into account to form a whole. There were also gaps in the literature on high-skilled gig workers who were not affected by the labour laws and the low-skilled gig workers are constantly questioned about their employment status and are not seen as self-employed in contrast to other countries.

Other platforms such as Upwork could be researched to generalize the results further and customers were not interviewed in this research, their experiences with the rating systems were not taken into account in this research. I would also recommend researching the effects on low-skilled gig workers, such as deliverers or drivers, where they work under different circumstances and the DLP might react differently.

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Appendix 1 Table search strings

Search strings	Reasons
Gig worker AND rating	Relation between gig worker and rating.
Gig worker awareness of customer ratings	Awareness of gig workers they receive customer ratings that could impact their gig work.
Gig worker reaction on customer rating	What reactions the gig workers have on customer ratings, if they do something to prevent a bad rating.
Gig worker AND behavior	What sort of behaviour gig workers have when they receive ratings and if their behaviour is influenced by ratings.
Gig workers AND well-being AND rating	The influence of ratings on the well-being of gig workers.

Appendix 2 Table relevant literature

Nr.	Citation details	Research question/ purpose/argument	Theory used	Followed methodology	Findings	Relevance for your research	Used keywords	APA
1.	(Chan, 2022)	Examine how workers anticipate the influences of metrics, live with metrics, and cope with algorithmic precarity	Grounded theory and LaRossa (2005) process	Qualitative, multi-case study. Comparative research. Interviews. Open and axial coding.	Participants were anxious about metrics primarily because of the disciplinary outcomes, that are, the threat of job loss and the valued job features. It also directs attention to how workers felt and experienced customer-sourced ratings and system-generated behavioral metrics variously across platforms.	Analysis of gig workers feelings about the control metrics.	(gig worker) AND (rating)	Chan, N. K. (2022). Algorithmic precarity and metric power: Managing the affective measures and customers in the gig economy. <i>Big Data & Society</i> , 9(2) https://doi.org/10.1177/20539517221133779
2.	(Rosenblat and Stark, 2016)	Our research extends these critiques of platform-based employers by examining how Uber drivers experience labor under a specific regime of automated and algorithmic management	Unknown	Case study, we performed archival and real-time analysis of posts by Uber drivers in online forums between December 2014 and September 2015	First, the information and power asymmetries produced by the Uber application are fundamental to its ability to structure control over its workers; second, the rhetorical invocations of digital technology and algorithms are used to structure asymmetric corporate relationships to labor, which favor the former. Our study of the Uber driver experience points to the need for greater attention to the role of platform disintermediation in shaping power relations and communications between employers and workers.	Consequences of bad ratings for gig workers, may lead to deactivation of accounts at Uber.	(gig worker) AND (rating)	Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of uber's drivers. <i>International Journal of Communication</i> , 10, 3758-3784.
3.	(Rahman, 2021)	how freelance workers contend with an opaque third-party evaluation algorithm—and with what consequences.	To build theory in this domain, I conducted an inductive analysis of freelance workers' reactivity when being subject to an opaque third-party evaluation algorithm in a labor platform setting.	Examined workers' reactivity to opaque third-party rating evaluations they received. Collected data from three primary sources: interviews, archival sources, and my observations as a registered client and freelancer.	My findings show the platform implemented an opaque evaluation algorithm to meaningfully differentiate between freelancers' rating scores. Freelancers experienced this evaluation as a form of control but could not align their actions with its criteria because they could not clearly identify those criteria. I found freelancers had divergent responses to this situation: some experimented with ways to improve their rating scores, and others constrained their activity on the platform. Their reactivity differed based not only on their general success on the platform—whether they were high or low performers—but also on how much they	How gig workers react on algorithmic scores placed by the platform.	(gig worker) AND (rating). gig worker reaction on customer rating	Rahman, H. A. (2021). The invisible cage: Workers' reactivity to opaque algorithmic evaluations. <i>Administrative Science Quarterly</i> , 66(4), 945-988. https://doi.org/10.1177/00018392211010118

					depended on the platform for work and whether they experienced setbacks in the form of decreased evaluation scores.			
4.	(Gandini, 2019)	What are the distinctive traits that characterise work(ing) through (and for) a digital platform?	labour process theory	literature research	The distinctive traits that characterize work(ing) through (and for) a digital platform.	Contributes to the understanding of the way in which labour power comes to be transformed into a commodity in a context where the encounter between supply and demand of work is mediated by a digital platform, and where feedback, ranking and rating systems serve purposes of managerialization and monitoring of workers	(gig worker) AND (rating). gig worker awareness of customer ratings.	Gandini, A. (2019). Labour process theory and the gig economy. <i>Human Relations</i> (New York), 72(6), 1039-1056. https://doi.org/10.1177/0018726718790002
5.	(Chan, 2019)	considers the socio-technical conditions under which drivers are subject to the platform surveillance and disciplinary power.	unknown	In-depth interviews. Explorative research of drivers' responses to ratings.	This article examines how Uber's rating system as an engine of anxiety shapes drivers' work practices through processes of surveillance and normalization.	Drivers are under surveillance of the digital platform they work for.	Using (Gandini, 2019)	Chan, N. K. (2019). The rating game: The discipline of Uber's user-generated ratings. <i>Surveillance & Society</i> , 17(1/2), 183-190.
6.	(Wood et al., 2019)	Evaluates the job quality of work in the remote gig economy	Constructing Grounded Theory (Charmaz, 2006)	face-to-face semi-structured interviews with 107 workers.	Remote gig work is shaped by platform-based algorithmic control. Despite varying country contexts and types of work, we show that algorithmic control is central to the operation of online labour platforms. Algorithmic management techniques tend to offer workers high levels of flexibility, autonomy, task variety and complexity. However, these mechanisms of control can also result in low pay, social isolation, working unsocial and irregular hours, overwork, sleep deprivation and exhaustion. Workers lacking these individual resources, skills and platform reputation, suffered from low incomes and insecurity.	Gig workers working on online labour platforms tend to get controlled by the algorithms on the platform and the results come with it. Workers ranked higher are getting more work.	Using connected papers on (Chan, 2022)	Wood, A. J., Graham, M., Lehtonvirta, V., & Hjorth, I. (2019). Good gig, bad gig: autonomy and algorithmic control in the global gig economy. <i>Work, Employment and Society</i> , 33(1), 56-75.
7.	(Dunn, 2020)	Takes a worker-centric approach of job quality and provides a typology of gig workers.	Data (transcripts) were inductively analysed, based on a process of open and then axial coding	Data were collected from 50 semi-structured, in-depth interviews with workers across 21 different gig work platforms, with all	We find that algorithmic control is central to the operation of online labour platforms. Workers may have little real choice but to work from home, and this can lead to a lack of social contact and feelings of social isolation. most workers had to work intense unsocial and irregular	Important job quality aspects for gig workers.	Using connected papers on (Chan, 2022)	Dunn, M. (2020). Making gigs work: Digital platforms, job quality and worker motivations. <i>New Technology, Work, and Employment</i> , 35(2), 232-249. https://doi.org/10.1111/ntwe.12167

			(Corbin and Strauss, 1990).	respondents residing in the United States.	hours in order to meet client demand. The autonomy resulting from algorithmic control can lead to overwork, sleep deprivation and exhaustion as a consequence of the weak structural power of workers vis-a-vis clients.			
8.	(Yu et al. 2022)	Explores how Chinese riders game the algorithm-mediated governing system of food delivery service platforms and how they mobilize WeChat to build solidarity networks to assist each other and better cope with the platform economy.	Research questions were created following the principles of Grounded Theory (Charmaz, 2006).	The research is based on 12 semi-structured interviews with Chinese riders from 5 cities, working for 4 Chinese food delivery platforms. In addition to the interviews, the research builds on a 4 months online observation (October 2020–February 2021) within 7 private WeChat groups composed of hundreds of Chinese riders.	The findings highlight how riders rely on WeChat for intense conversations, exchanges, and complaints about the food delivery platforms they work for. While food delivery platforms set up their own WeChat groups in different cities to facilitate communication between riders and issue work notices, all interviewees point out that they prefer to establish their own digital environments for various reasons. Our results illuminate different forms of resistance to the power of the platforms that are emerging among Chinese riders, such as complex tactics of “gaming” the platforms’ algorithm, together with forms of collective organization established through private chats. These tactics are evidence of emerging forms of solidarity among riders who reject the competitive ethos encoded in the algorithms of the Chinese food delivery apps and instead organize to support each other to survive in this ruthless economy.	Gig workers in China use different tactics to resist the algorithmic platform.	Using connected papers on (Chan, 2022)	Yu, Z., Treré, E., & Bonini, T. (2022). The emergence of algorithmic solidarity: unveiling mutual aid practices and resistance among Chinese delivery workers. <i>Media International Australia</i> , 183(1), 107-123.
9.	(Xiongtao, 2021)	Investigates the role of negative customer treatment in the context of gig work and its impact on gig workers’ sabotage behavior.	Conservation of resource (COR) theory (Brotheridge and Grandey, 2002)	A questionnaire survey approach was used in the study, collected three-wave survey data from 258 Chinese gig workers including food-deliver platform workers and app-based ride-hailing drivers.	Results indicate that negative customer treatment can also predict gig workers’ service sabotage through work meaningfulness. Furthermore, positive customer treatment acted as an effective safeguard against the effects of negative customer treatment on employee service sabotage. Trait psychological resilience can also mitigate the effects of a low level of work meaningfulness.	Gig worker behavior when receiving negative customer treatment.	(gig worker) AND (behavior)	Xiongtao, H., Wenzhu, L., Haibin, L., & Shanshi, L. (2021). How gig worker responds to negative customer treatment: The effects of work meaningfulness and traits of psychological resilience. <i>Frontiers in Psychology</i> , 12, 783372-783372. https://doi.org/10.3389/fpsyg.2021.783372
10.	(Mäntymäki et al., 2019)	Explores how the presence of the digital platform manifests itself in workers’ perceptions of	Constant comparisons in grounded theory research (Strauss & Corbin, 1998)	Employ the Gioia method to analyze 39 interviews conducted.	Advance the understanding of the nature of work done for digital platforms. Advance the understanding of contributors’ value-creation processes and motivation.	The advantages that gig workers find important in their work. How consumer ratings impact their work. Interview data gig workers.	(gig workers and well being and rating)	Mäntymäki, M., Baiyere, A., & Islam, A. K. M. N. (2019). Digital platforms and the changing nature of physical work: Insights from ride-hailing. <i>International Journal of Information</i>

		their work in the context of ridehailing.					Management, 49, 452-460. https://doi.org/10.1016/j.ijinfomgt.2019.08.007	
11.	(Myhill, 2021)	Exploring gig work through an application of notions of job quality associated with Scotland's Fair Work Convention.	Unknown	A qualitative approach using semi-structured interviews was adopted.	A key finding is, in spite of a deficit in objective characteristics of Fair Work, the subjective experience varies between platforms as well as in accordance with individual worker characteristics, such as between those undertaking gig work as a primary or supplementary source of income. A further key finding suggests the growth in gig work reflects the normalisation of what in the past would constitute poor working conditions. Taken together, the findings highlight limitations of theoretical models of job quality due to an emphasis on traditional employment.	Consequences of customer ratings on gig workers. Definition of gig economy.	gig worker AND rating	Myhill, K., Richards, J., & Sang, K. (2021). Job quality, fair work and gig work: The lived experience of gig workers. <i>International Journal of Human Resource Management</i> , 32(19), 4110-4135. https://doi.org/10.1080/09585192.2020.1867612
12.	(Stanford, 2017).	Provides historical and theoretical perspective on the expansion of digitally mediated work, to better understand the range of forces (technological, economic and socio-political) at work.	Unknown	Unknown	It shows that the major features of platform work were all visible in earlier periods of capitalism, but they became less prominent with the rise of the 'standard employment relationship' in the 20th century. The rise and fall of the standard employment relationship is described with reference to the changing context for the labour extraction effort of private employers. A better understanding of the complete range of forces driving changes in work organisation, and a rejection of the assumption that they are technologically determined and hence inevitable, can inform regulatory and political responses to the rise of platform work.	Explanation of rating systems and what consequences it has on gig workers.	gig worker AND rating	Stanford, J. (2017). The resurgence of gig work: Historical and theoretical perspectives. <i>The Economic and Labour Relations Review</i> , 28(3), 382-401.
13.	(Rosenblat et al., 2017)	A case study to explore how bias may creep into evaluations of drivers through consumer-sourced rating systems, and draw on social science research to demonstrate how such bias emerges in other types of rating and evaluation systems.	Disparate treatment or disparate impact theory.	The collection (and possible publication) of descriptive statistics about ratings and employment outcomes among different groups of drivers	The interventions described thus far attempt to address the potential discriminatory impact of consumer ratings by altering the structure or procedures of the platform itself.	Shows how bias might creep into the ratings systems. Shows how such bias emerges in a science social research.	Using connected papers on (Rosenblat, 2016)	Rosenblat, A., Levy, K. E., Barocas, S., & Hwang, T. (2017). Discriminating tastes: Uber's customer ratings as vehicles for workplace discrimination. <i>Policy & Internet</i> , 9(3), 256-279.

14.	(Wu et al., 2019)	Provides a novel empirical account of the labor control of digital platforms, and more importantly, their effects on different types of workers.	Labor process theory	Exploratory field research was conducted. A total of 120 interviews were conducted with Uber drivers as well as Uber managers. Nonparticipant observations made as passengers on a regular basis in all these cities during the fieldwork, one researcher also engaged directly in participant observation, working as a driver	The authors have identified three crucial strategies that Uber has devised to control its drivers' labor process: an incentive pay system, a customer evaluation system, and flexible work arrangements. These strategies will, however, demonstrate significant effects on drivers' working hours and income only when we consider the different motivations of Uber drivers. Specifically, the working efforts of those who drive for Uber as their only source of income are responsive to incentive pay schemes and a platform's evaluation system, but are not as responsive to work flexibility.	Interviews with gig workers (Uber) and how they prevent bad ratings by giving extra services.	gig worker reaction on customer rating	Wu, Q., Zhang, H., Li, Z., & Liu, K. (2019). Labor control in the gig economy: Evidence from uber in china. <i>Journal of Industrial Relations</i> , 61(4), 574-596. https://doi.org/10.1177/0022185619854472
15.	(Sutherland et al., 2020)	Digital platforms appear to provide an alternative to certain aspects of precarity by helping workers find work consistently and securely. However, these platforms also introduce their own demands and constraints	Process of open, then axial coding (Corbin and Strauss, 1990)	Drawing on 20 interviews with online freelancers, 19 interviews with corresponding clients and a first-hand walkthrough of the Upwork platform, we identify critical literacies (what we call gig literacies), which are emerging around online freelancing.	Findings from this work add to these dimensions of the personal holding environments by underscoring connections to digital platforms – which serve as moorings for workers' ideation of personalized, independent work. By providing evaluative measures, structuring contracts, and making visible a large network of clients, the platform serves as the locus for the worker's ability to choose their own work, and furthermore buffers the worker against the anxieties of finding work or being rejected. In fact, incorporating the role of digital platforms into the personal holding environments of online freelancers more effectively reflects the sociotechnical nature of digital gig work and how digital mediation sets it apart from the more traditional forms of alternative work.	Interviews with gig workers on online platforms and how they kept their ratings.	gig worker reaction on customer rating. gig worker awareness of customer ratings	Sutherland, W., Jarrahi, M. H., Dunn, M., & Nelson, S. B. (2020). Work precarity and gig literacies in online freelancing. <i>Work, Employment and Society</i> , 34(3), 457-475.
16.	(Cameron et al., 2022)	How has this shift in the distribution of control among platforms, customers, and workers affected the relationship between control and resistance?		Literature review. In-person riders view and experience. Semistructured interviews and focused on drivers' everyday	Our comparative analysis of two platforms using algorithmically mediated customer control shows how control arrangements among the platform, customer, and workers shift at each stage of the work process, revealing a temporal co-	Interviews with gig workers and their actions on the rating systems.	gig worker reaction on customer rating	Cameron, L. D., & Rahman, H. (2022). Expanding the locus of resistance: Understanding the co-constitution of control and resistance in the gig economy. <i>Organization Science</i> , 33(1), 38-58.

				experiences, including interactions with the app, customers, and RideHail.	constitution between control and covert resistance.			
17.	(Duggan et al., 2020)	Provide conceptual clarity on gig work by moving away from monolithic perspectives and differentiating it into three key variants: capital platform work; crowdwork; and app-work. To examine the criticality of management-by-algorithm, a relatively novel and alternative means of utilising the influential role of technology to monitor, manage and control workers	Psychological contract theory	literature research	All things considered, the rise in app-work and the all-pervasive role of the algorithm brings a need for a more critical consideration of the consequences of this for employment relations and of how HRM, as a function and discipline, should react and evolve.	Definitions of three variants of gig work.	gig worker awareness of customer ratings	Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. (2020). Algorithmic management and app-work in the gig economy: A research agenda for employment relations and HRM. <i>Human Resource Management Journal</i> , 30(1), 114-132.
18.	(Bucher et al., 2020)	Shows how workers adopt direct and indirect “anticipatory compliance practices”, such as undervaluing their own work, staying under the radar, curtailing their outreach to clients and keeping emotions in check, in order to ensure their continued participation on the platform, which takes on the role of a shadow employer.	Grounded Theory Research (Corbin & Straus, 1990)	Systematic content analysis of 12,294 scraped comments from an online community of digital freelancers,	First, the study builds on sociomateriality to examine how gig workers deal with algorithmic management by outlining direct and indirect practices that workers engage in. Focusing on the social agency of gig workers and their understanding of the algorithm’s materiality, our findings outline how workers react to, accommodate and work against algorithmic management. We thus extend previous insights focused on a more passive account of workers’ experiences by unearthing practices that workers develop in the face of algorithmic management (Anteby and Chan, 2018; Kellogg et al., 2020; Tassinari and Maccarrone, 2020). Second, we uncover implications of algorithmic management by introducing the concept of “extra work.” Our findings show how platforms relying on algorithmic management act as “shadow employers” and, as such, profoundly shape client-worker relationships, pushing workers to	Sets out what gig workers do to avoid bad ratings	gig worker awareness of customer ratings	Bucher, E. L., Schou, P. K., & Waldkirch, M. (2021). Pacifying the algorithm—Anticipatory compliance in the face of algorithmic management in the gig economy. <i>Organization</i> , 28(1), 44-67.

				engage in cognitive, social and emotional “extra work” to ensure their continued access, visibility and reputation on the (Gandini, 2019; Kuhn, 2016; Orlikowski and Scott, 2014). Last, our article extends the discussion on power imbalances in the gig economy (Curchod et al., 2019) by outlining how workers’ practices and 62 Organization 28(1) their shared understanding of the materiality of algorithms produce “subjectification” (Fleming and Spicer, 2014). This dynamic assigns power to the algorithm that goes beyond its material design and, thus, re-enacts power imbalances in the everyday gig work.				
19.	(Anwar & Graham, 2020)	Examines how remote gig workers in Africa exercise agency to earn and sustain their livelihoods in the gig economy.	Unknown	In-depth interviews with 65 remote workers	We show how different types of gig workers create their own labour geographies through everyday individual practices that are informal, subtle and unorganised. Resistance acts seemed to be largely the domain of those workers who found success on platforms. Through these everyday practices, gig workers were able to avoid excessive workplace monitoring, representing a form of job autonomy. As gig workers gain experience on Upwork, they also begin to choose their jobs and clients, and are able to get flexible working hours and even demand higher wages. However, the agency of gig workers is constrained by two key factors. One is the socio-economic and cultural contexts in which workers are embedded. The second factor is the capital’s own agency, which encroaches on the class power of workers.	Struggles gig workers have in their daily live/work.	gig worker awareness of customer ratings	Anwar, M. A., & Graham, M. (2020). Hidden transcripts of the gig economy: labour agency and the new art of resistance among African gig workers. <i>Environment and Planning A: Economy and Space</i> , 52(7), 1269-1291.
20.	(Ravenelle, 2019)	The purpose of this paper is to utilize McGregor’s Theory X and Theory Y as a framework to discuss two gig economy platforms and how their differing management assumptions affect worker perceptions of themselves as entrepreneurs.	McGregor’s (1960) Theory X and Theory Y	Qualitative interviews and demographic surveys with 41 contract workers from	The Theory X management assumptions and correlated behaviors directly contradict the entrepreneurial ethos marketed by the platforms, resulting in a psychological contract violation for workers and negative responses to the platform. In comparison, Theory Y managerial assumptions and correlated behaviors can be utilized to encourage worker innovation, creativity and sense of self as an entrepreneur.	Examines how gig worker attitudes toward platform firms, and views of themselves as entrepreneurs, are affected by algorithm-implemented management policies.	gig worker awareness of customer ratings	Ravenelle, A. J. (2019). “We’re not uber:” control, autonomy, and entrepreneurship in the gig economy. <i>Journal of Managerial Psychology</i> .

21.	(Meijerink & Keegan 019)	Explores the notion of HRM in the gig economy, where intermediary platform firms design and implement HRM activities while simultaneously trying to avoid the establishment of employment relationships with gig workers.	Human resource management (HRM) theory	A novel ecosystem perspective to develop propositions on the role and implementation of HRM activities in the gig economy.	We show that HRM activities in the gig economy are designed to govern platform ecosystems by aligning the multilateral exchanges of three key gig economy actors: gig workers, requesters, and intermediary platform firms, for ensuring value co-creation. We argue that the implementation of HRM activities in the gig economy is contingent on the involvement and 2 activities of these gig economy actors. This means that they are not mere recipients of HRM but also actively engaged in, and needed for, the execution of HRM activities.	The HRM practices within the gig economy are present, but in another form.	gig worker awareness of customer ratings	Meijerink, J., & Keegan, A. (2019). Conceptualizing human resource management in the gig economy: Toward a platform ecosystem perspective. <i>Journal of managerial psychology</i> .
22.	(Flanagan, 2019)	Argues that digital platforms are instruments of a fundamental shift in the governance of home-based service work, from a system of 'dyadic' to one of 'structural' domination.	Unknown	literature research. Data analysis.	In sum, then, this article suggests that gig platform work risks entrenching a new kind of 'life cycle' occupation in Australia society, only viable for young adults or those without caring responsibilities, where the only means of improvement is 'exit' rather than 'voice', and where the consequences of one mistake or misunderstanding may cast a reputational shadow over an entire lifetime of future work.	Sum up of different unfairness against gig workers	gig worker awareness of customer ratings	Flanagan, F. (2019). Theorising the gig economy and home-based service work. <i>Journal of Industrial Relations</i> , 61(1), 57-78.
23.	(Veen et al., 2020)	Labour process analysis to unpack the distinctive features of capital's control regimes in the food-delivery segment of the Australian platform-economy and assesses labour agency in response to these.	Labour process theory (LPT) analysis (Thompson, 1990)	Qualitative case study. qualitative case study approach with an influential case design (Yin, 2013).	First, the technological infrastructure of the platforms, based on technical and computer controls, is critical to the realisation of the labour process, with the 'apps' functioning as the point of production. Sophisticated computer controls enable platforms to monitor workers in real time. Second, platforms create information asymmetries to constrain worker choice, curtail their ability to make informed decisions and express agency. Third, the obfuscated nature of the performance management systems limits workers' understanding of the bureaucratic controls, acting as another control lever and eliciting compliance with the work rules.	A workers' view and experience as a gig worker on platforms.	gig worker awareness of customer ratings	Veen, A., Barratt, T., & Goods, C. (2020). Platform-Capital's 'App-etite' for control: A labour process analysis of food-delivery work in australia. <i>Work, Employment and Society</i> , 34(3), 388-406. https://doi.org/10.1177/0950017019836911

24.	(Griesbach et al., 2019)	Analyzes the processes by which food delivery platforms control workers and uncovers variation in the extent to which such platforms constrain the freedoms—over schedules and activities—associated with gig work.	Labor process theory, Gandini (2019:1049)	In-depth interviews with 55 respondents working on food delivery platforms, as well as a survey of 955 platform food delivery workers.	Drawing on in-depth interviews with 55 respondents working on food delivery platforms, as well as a survey of 955 platform food delivery workers, we find that although all of the food delivery platforms use algorithmic management to assign and evaluate work, there is significant cross-platform variation. Instacart, the largest grocery delivery platform, exerts a type of control we call “algorithmic despotism,” regulating the time and activities of workers more stringently than other platform delivery companies.	Qualitative interview with delivery gig workers. Notes about their feelings and the benefits of gig work.	Found using (Chan, 2022)	Griesbach, K., Reich, A., Elliott-Negri, L., & Milkman, R. (2019). Algorithmic control in platform food delivery work. <i>Socius</i> , 5, 2378023119870041.
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Appendix 3 Table themes

Major themes that arise from the literature analysis	Papers that cover these themes
Benefits and drawbacks of the platform and its rating system	Anwar and Graham (2020); Cameron and Rahman (2022); Chan (2019, 2022); Duggan et al. (2020); Dunn (2020); Flanagan (2019); Gandini (2019); Griesbach et al. (2019); Mäntymäki et al. (2019); Meijerink and Keegan (2019); Rahman (2021); Ravenelle (2019); Rosenblat et al. (2017); Rosenblat and Stark (2016); Sutherland et al. (2020); Veen et al. (2020); Wood et al. (2019); Wu et al. (2019); Yu et al. (2022)
Gig workers well-being	Anwar and Graham (2020); Bucher et al. (2021); Cameron and Rahman (2022); Chan (2022); Dunn (2020); Griesbach et al. (2019); Mäntymäki et al. (2019); Myhill et al. (2021); Rahman (2021); Ravenelle (2019); Stanford (2017); Veen et al. (2020); Wood et al. (2019); Wu et al. (2019); Xiongtao et al. (2021).
Reaction and behaviour of gig workers on customer ratings	Anwar and Graham (2020); Bucher et al. (2021); Cameron and Rahman (2022); Chan (2022); Meijerink and Keegan (2019); Sutherland et al. (2020); Veen et al. (2020); Wood et al. (2019); Xiongtao et al. (2021); Yu et al. (2022)

Appendix 4 Synthesis table

What effect do positive or negative customer ratings have on the working behaviour of gig workers?

Themes Autors	Gig workers well-being						
(Chan, 2022)	Gig workers with algorithmic precarity would try to manage the ratings but still feel powerless against the algorithmic system. The systems doesn't provide the information they need to improve their performance.	Gig workers who live on gig work as the primary income are more worried and anxious of getting kicked off the platform/getting deactivated. They will try their best to maintain the rating.	Some customers are unpredictable, they have unreasonable requests and expectations. Some customers give food deliverers low priority and let them wait some time before giving them the food to deliver.				
(Rosenblat and Stark, 2016)							
(Rahman, 2021)	The inability to learn how the system reacts to customer ratings, frustrated the gig workers and made them feel paranoid.						
(Gandini, 2019)							
(Chan, 2019)							
(Wood et al., 2019)	Gig workers experienced high level of competition on the platforms and at the same time the tasks could be highly intensive. To minimise unpaid downtime gig workers tried to complete the tasks as quickly as possible, which increased work intensity, and increase earnings. This lead to dealing with multiple clients' deadlines and requirements at the same time (add to intensity).	Solving unforeseen problems and complexity adds to the job quality of gig workers, while data entry work were boring.	The pace of the work is determined by clients, as the pool of gig workers is quite large.	Gig workers find it beneficial to work remotely, not having to travel to work, combining other work like studying or alternative paid work.	Social contact was not possible because of the working times, many gig workers work more than 40 hours a week, and some even without much rest. Communicating with clients took place when it was convenient for the clients and work was send when the clients were working. The difference in time zone was not an excuse for gig workers not to work.	Gig workers with a strong reputation and high ranking, would experience less pressure towards work intensity and income security. They could also spend more on well-being.	Social contact was not possible because of the working times, many gig workers work more than 40 hours a week, and some even without much rest. Communicating with clients took place when it was convenient for the clients and work was send when the clients were working. The difference in time zone was not an excuse for gig workers not to work.
(Dunn, 2020)	Gig workers experience taking days off as a high barrier, as they wont have any income on those days. Most of them don't have any 'rainy-day funds' or health insurance. A lot of gig workers are unhappy about their circumstances, but at the same time glad to have at least gig work. Depending on the type of gig	Gig work has some drawbacks, incomes are unstable, unpredictable hours and schedule and lack of benefits.					

	workers they could enjoy the flexibility they need with gig work, earn money for luxury products, ease the financial burden, or enjoying the interaction with people.						
(Yu et al. 2022)							
(Xiongtao, 2021)	Customer mistreatment leads to gig workers not getting benefits they invested in the platform, which leads to gig workers finding their work meaningless.						
(Mäntymäki et al., 2019)	Benefits of gig work is; being your own boss, alternative to unemployed, no pressure or stress, work-life balance, flexibility, no working time obligations, extra income, referrals rewards.	Some gig platforms use apps to monitor the drivers routes, driving behaviour, speeding, harsh braking, and phone usage to contribute to safer driving and receive better customer ratings. This also leads to invasion of the privacy of drivers.					
(Myhill, 2021)	Gig workers stil felt a sense of security and control over when to work, while evidence suggest gig work is tightly controlled thought tracking software and task distribution. Job insecurity comes forth from the fact if they had gig work as the primary income, as the wages might fluctuate without their consent. Most gig workers found gig work temporary and might cease to exist and would have liked a standard form of employment.						
(Stanford, 2017).	Platform work does not cope with the current working standards, the customers don't have to pay the gig workers minimum wages. They can be fired or hired at will and are not protected by the dismissal law of the country where the gig worker lives.						
(Rosenblat et al., 2017)							
(Wu et al., 2019)	In order to receive a realistic income, drivers had to spend a long time online to wait for and take on rides.	The flexibility gig work offered were the main reason gig workers who view gig work as a secondary job, were attracted to it. They also offered more rides due to the work flexibility, while the sole-source drivers offered more ride due to the payment and the rating system.					

(Sutherland et al., 2020)							
(Cameron et al., 2022)	Gig workers get tired of constantly being cautious to maintain their high ratings and access to the platform.						
(Duggan et al., 2020)							
(Bucher et al., 2020)	Gig workers are also afraid to try to get too many jobs, because the unsuccessful job hiring rate might be counted and used to suspend or ban them. The fear of getting a difficult client might result in a bad rating.	Gig workers need to keep emotions in check when communicating with clients, even when they are treating them unfair or giving them negative feedback as it will result in less work from the platform. They also had to swallow negative emotions and beg clients to not leave a negative review as it will impact their work.					
(Anwar & Graham, 2020)	Higher educated gig workers had less trouble finding work, as they saw gig work as a secondary income, while low educated gig workers had more trouble finding work. For low educated gig workers, gig work was the primary income, so they cannot wait days or weeks to score one job						
(Ravenelle, 2019)	Gig workers who did accept jobs in time or have negative ratings, could face reduced work opportunities got warnings or temporary deactivation. Therefore they had to be 24/7 online to be able to accept those tasks.	As TaskRabbit continually warn them when tasks haven't been completed within a set time, gig workers felt like they were employees instead of self-employed contractors, though they did not get any benefits out of it.					
(Meijerink & Keegan 019)							
(Flanagan, 2019)							
(Veen et al., 2020)	Gig workers thought of themselves as their own bosses, they can work as they wish. (psychological effect?). Gig workers found the UberEATS app ratings not justified, they are being rated for elements out of their control.						
(Griesbach et al., 2019)	Many gig workers were positive about the autonomy, the flexibility to schedule work and the freedom to cancel work or enjoy a bit of time off. They also were their own boss with no one to report to.						

Themes Autor	Reaction and behaviour of gig workers on customer ratings					
(Chan, 2022)	Gig workers working on gig platforms could document communication with customers and keep a log to use as evidence in the event they get into a dispute or receive low ratings.	An important skill for gig workers is people skills, managing customers' expectations positively influences the customers.	High-skilled gig workers are more focused on creating a personal holding environment, where they create their own network of clients and other gig workers, set up their own workspaces, work around the platform if needed, presenting themselves and create clear boundaries between private and professional lives, and habits of managing tasks.	Gig workers would discuss on forums and by trial and error what metrics do not have negative consequences on employment opportunities. Furthermore they could filter out difficult customers and evade them. On some platforms gig workers have the ability to rate the customers, so they could use that to filter out difficult customers, but not all platforms have that ability. Communicating expectations to the customers was also a way to deal with low ratings and might help to protect them by using the chat as evidence.	Between high-skilled and low-skilled gig workers there might be a difference in the algorithmic control systems. On the high-skilled gig platforms the gig workers can work around some set rules, like contacting clients outside of the platform after making the first contact within the platform, but with the low-skilled gig platforms it is not as easy to work around it as customers only come in contact with drivers after an order.	Most gig workers kept close attention to customer ratings, anticipated the consequences of the metrics and acted accordingly. Low customer ratings could lead to less employment chances and important job features.
(Rosenblat and Stark, 2016)						
(Rahman, 2021)						
(Gandini, 2019)						
(Chan, 2019)						
(Wood et al., 2019)	Gig workers experienced high level of competition on the platforms and at the same time the tasks could be highly intensive. To minimise unpaid downtime gig workers tried to complete the tasks as quickly as possible, which increased work intensity, and increase earnings. This lead to dealing with multiple clients' deadlines and requirements at the same time (add to intensity).					
(Dunn, 2020)						
(Yu et al. 2022)	The pressure between the gig workers developed a response that drove them into creating private social media groups to share tactics on improving ranking. Within the social media groups, gig workers share solidarity bonds and support each other rather than compete with each other. Gig workers (Chinese food deliverers) are creatively resisting the pressure created by the platform, they work for multiple platforms, refuse to follow specific routes, create fake orders, refuse to accept orders from specific					

	regions, and help each other using social media groups when a driver needs help.					
(Xionghao, 2021)	Gig workers are likely to sabotage against customers after experiencing negative customer treatment.					
(Mäntymäki et al., 2019)						
(Myhill, 2021)						
(Stanford, 2017).						
(Rosenblat et al., 2017)						
(Wu et al., 2019)						
(Sutherland et al., 2020)	To improve the ratings, workers had to take a number of low-paying jobs or breaking up projects into smaller parts and receive ratings for the small project parts. To avoid bad ratings, gig workers sometimes refunded the clients or canceled the contract without pay, which in turn increased the workers' precarity.	Gig workers were required to present themselves professionally on the platforms' channels, which meant things like chatting with clients or having extra skills.	Due to disputes, gig workers often log the chat or the conversation summary on the platform.	Gig workers often exchange ideas with more experienced gig workers, read on forums, monitoring one's own rating, analysing the input and output on the rating systems and reading the documentation. The opaque algorithms made it difficult for starters on the platform. To retain the autonomy as much as possible, the gig workers used various methods to reject the platforms' control, for example some made transactions off-platform after finding clients on the platform.		
(Cameron et al., 2022)	Gig workers use their knowledge about the system to not let customer leave a negative rating or have appropriate customers help them increase their ratings.	The most highly rated gig workers are not only delivering good work, they have studied the labour process, react on clients demands, analyse how the platforms' algorithm collect and use their data, so they can counter the actions of the platform.	Gig workers persuade customers into breaking down projects into smaller parts, so they can get potentially more high ratings.	There are various resistance tactics the worker can use, they can reject customers and let the platform find other customers, which results in extra time and effort of the platform. Gig workers also cancel on-going work to protect their ratings, as customer cannot rate unfinished work. If previous things did not work, gig workers can file disputes so the platform needs to		

				invest time to research the low rating.		
(Duggan et al., 2020)						
(Bucher et al., 2020)	Gig workers are very careful when mentioning bugs, voicing their concerns on the internal forum or to service agents. They try to avoid grey area words in chats, afraid of getting caught by the algorithm and getting banned.	Gig workers sell their labor short in order to increase chances of getting a match or gaining favorable ratings from clients, that will lead to an increase of their job success score. Furthermore they add free labour to fix client issues, providing free work samples, or charging fewer hours than they have really worked. Lowering the hourly rate is also a practise of newer gig workers who have no reputation on the platform yet.	Gig workers resist the algorithmic control by using specific tricks, to boost the changes of gaining or maintaining access, visibility and reputation, combined with getting high ratings from clients.			
(Anwar & Graham, 2020)	Gig workers were able to resist the platform by using specific practises. That's how they avoided excessive workplace monitoring, representing a form of job autonomy. After gaining experience, they could demand higher wages, choose their jobs and clients, and demand higher wages.	Gig workers resist the platform using paid fake client ratings, buy high rated accounts with locations set in EU or US, settings up multiple accounts to use for bidding, do free work to get high ratings. Another form of resistance is working on two monitors to deceive the monitoring algorithm as it can only monitor data on one monitor.	Gig workers share experiences on social media groups on how to avoid bad clients, buying and selling accounts, reoutsourcing jobs, etc. These practises were not only on social media, but also on their personal networks.	Gig workers filter bad clients when searching for work, negotiate wages by cancelling contracts after delivering outstanding work, withholding work until clients pay them, and leave negative feedback to clients who harass them.		
(Ravenelle, 2019)						
(Meijerink & Keegan 019)	Gig workers sometimes mutually agree to not give ratings to each other, or they choose to give each other a high rating so it's a win-win situation.	The gig worker or client can agree to work and pay outside of the platform after getting linked up on the platform.				
(Flanagan, 2019)						
(Veen et al., 2020)	Gig workers would often not follow the routes laid out by the app, they use their own routes which are faster or safer.	Gig workers would try to predict places where the most order might be given, or where the most profitable areas are.				
(Griesbach et al., 2019)						

Themes Autor	Benefits and drawbacks of the platform and its rating system			
(Chan, 2022)	Rating systems metrics can easily be misused by customers to force the gig workers to comply with unreasonable expectations and requests.	On some platforms (Uber), failing to maintain a high rating might lead to deactivation of the account.	Customer ratings also impact the visibility on platforms, with a high customer rating you will get a more prominent place on the platform. With a high visibility the chances of getting more clients will be higher.	The completion rate in platform systems might impact the ranking, which in turn also impacts the flexibility of the gig work. It limits the ability to rejects orders.
(Rosenblat and Stark, 2016)	Although Uber claims to give the drivers systematic freedom or flexibility, the Uber app's system uses algorithm to take control of the drivers using performance targets, driver behavior and electronic surveillance.			
(Rahman, 2021)	On some platforms customer evaluations determined the visibility and success of the gig worker on that platform. The systems' algorithm for the evaluation was not transparent, the drivers could not learn how to perform better. The system felt like an invisible cage.	The following components are opaque: evaluation criteria, they can change accordingly; execution of the evaluation, evaluation changes intervals are not consistent; magnitude of the evaluation, the degree evaluation changes is not clear; impact of the evaluation, affection of score changes unclear for future work; who influences the evaluation, which party eventually changes the score is not clear.		
(Gandini, 2019)			Gig platforms are designed as organisational models, with the algorithmic systems as managers controlling the gig workers with the ratings, and prevents the workers to socialise with each other while reducing the resistance and unionisation potential.	
(Chan, 2019)	On some digital platforms, the rating system is a game between the organisation, the technical platform and the gig workers. In that case the rating system is not considered to be punishing gig workers, but challenge them to perform better. As the platform changes, so do the gig workers reactive practises adjusted towards the ratings.			
(Wood et al., 2019)	Gig workers were rated according to their delivered work, the more experience and higher ratings they had, the more work they would receive. And the higher they get on the algorithmic ranking.	Working on gig platforms gives them autonomy, the freedom to choose the work and to choose who to work with. It gives the opportunity to choose work they would not have experienced and connect to multiple foreign clients.	The competition to win over a job is quite high, the instant a job is post, gig workers all over the world will enter bids. There is an oversupply of work, that leads to battle over jobs and fear of being undercut by other gig workers. They were also disposable, as there are many other gig workers wanting the jobs. Job security on gig platforms is also non-existent, the gig workers see gig work as the main income.	The gig workers with a strong reputation over a long period of time were more known to clients and highly ranked by the platform algorithms, would get more work presented.

(Dunn, 2020)	The entry bar for platforms differ, some have higher demands of skills than other platforms.			
(Yu et al. 2022)	The rating systems pushes the gig workers into gamification of the work, it pushes them into improving their performance and climb the rankings and obtain benefits. The higher the ranking, the more orders will be received and the more revenue the gig worker gets. Some platforms work with badges or special statuses according to the performance and give the high ranking gig workers special privileges, like selecting specific areas or high-prices orders. Platforms even hold competitions to the gig workers earn gadgets or extra cash.			
(Xiongtao, 2021)				
(Mäntymäki et al., 2019)	The platform (driving) drawbacks; no knowledge of destinations from ride-requests, inability to control mismatch between travel time to a pickup and the actual trip duration, supply-and-demand volatility, reduction of fares (without consent of drivers), increase of new drivers, no control over clients' driver ratings (not only at driving platforms), fast elimination due to weak customer ratings (not only at driving platforms).	The platforms operates significant management control using complex and invisible algorithms to use market mechanisms, rating systems and online surveillance to control the workers and the rates.		
(Myhill, 2021)				
(Stanford, 2017).				
(Rosenblat et al., 2017)	On the digital platforms, the need to perform quality control using rating systems is a necessary evil to manage the service quality of the gig workers. Even though it might have a great impact on members of protected classes.	Rating systems have a promising future, but at the same time discriminates gig workers as labour practises are not always fair.		
(Wu et al., 2019)	Due to the platforms' control, autonomy was almost non-existent, work became less flexible over time.	Digital platforms' algorithmic control is used to attract, manage and retain gig workers, while managing their working time.		
(Sutherland et al., 2020)	Upworks' rating system gave gig workers with a high rating more jobs, while gig workers with low ratings almost couldn't find any jobs and had to bid for jobs. Getting a good rating meant that gig workers had to understand the algorithm behind the platform, continuously monitor their own rating.	Ratings on platforms cannot be transferred to other platforms, likewise, work history and evaluations on other platforms cannot be imported.		
(Cameron et al., 2022)	Algorithmic platforms match a client with a worker depending on the acceptance rates or ratings. Furthermore the algorithm has more control over gig workers who are dependent on the income that comes from it, as most of them cannot find other			

	<p>jobs. The control is het highest when they are in the matching process.</p> <p>Some platforms even warned the customers and gig workers to not let the conversations go off the platform after exchanging contact information, so the platform can monitor the conversation.</p>			
(Duggan et al., 2020)	Digital platform with algorithmic control are being used to take on human resources (HR) tasks instead of dedicated HR-people doing this. The platform is searching, matching and distributing the work, and managing performance of gig workers. Thus employment risks are shouldered by the gig workers, as they are seen as self-employed contractors.			
(Bucher et al., 2020)				
(Anwar & Graham, 2020)	The platform closes accounts when a gig worker has put up too many bids without winning any of them.			
(Ravenelle, 2019)	It was also easy to get kicked out when a task has not been forfeited when they are asked to.			
(Meijerink & Keegan 019)	<p>The platform uses the following HR like activities; expelling gig workers with inappropriate behaviour, offers referral schemes to attract new gig workers, train peers to ensure clients are offered high-quality services, instant response to requests and match people for it.</p> <p>Clients evaluate gig workers and gig workers can evaluate clients, demanding the gig worker to find labour through the platform, and ensures that the gig worker can capture a part of the fee when the client doesn't pay.</p>	The platform offer rating systems to let clients rate gig workers, offer incentives, allow the option to provide developmental feedback		
(Flanagan, 2019)	Platform work offers more strict rules and control, while promising flexibility and freedom. The gig workers ought to respond in a timely manner, if they do not, they might face lower ratings and financial sanctions of the platform.	Most platforms only provide clients to leave ratings, but not the other way around. This way gig workers cannot protest the, in their eyes, unfair rating. The power clients get from the platform force the gig workers to comply with injustice.		
(Veen et al., 2020)	<p>Some gig workers were forced to work in specific zones or else they would not receive orders or they would get special bonuses when operating in that zone.</p> <p>Deliverers were forced for the delivery to wait in the restaurant, as they took their time to prepare it.</p>	<p>Accepting or rejecting orders can be quite frustrating, the time limit is about 10 seconds. Failing to do so had serious consequences.</p> <p>The platform uses GPS-data, worker-app interactions, and customer and/or restaurant ratings to control the gig workers.</p>	Platforms were black boxes to the gig workers, they assumed their accounts would get deactivated when the performance is falling below a certain threshold. High performing gig workers would get more orders.	
(Griesbach et al., 2019)	Gig platforms use algorithmic systems to control the freedom the gig workers get, they schedule your orders, use rating systems to control the jobs or account, pricing of work, exerting pressure to accept jobs.			

Appendix 5 Interview themes

Themes used for the interview questions.

- Working experience.
- Customer rating, rating systems (relates to SRQ1: *What is the reaction of gig workers when they receive customer ratings and how is their work influenced?* and SRQ3: *How do rating systems contribute to the impact on working behaviour of gig workers?*).
- Behaviour/reaction of gig workers (CQ).
- Well-being of gig workers (SRQ2: *How is the well-being of gig workers influenced by customer ratings, and do they feel stress or get anxious because of those ratings?*).

Appendix 6 Messages posted on social media and forums

In het Nederlands:

Beste,

Ik volg momenteel de masteropleiding Business Process Management and ICT en voer een kwalitatieve afstudeeronderzoek uit naar gig workers (ZZP'ers/flexwerkers) die op algoritmisch gestuurde platformen werken. Hiervoor zoek ik minimaal 2 respondenten om telefonisch of via videobellen een interview af te nemen waarbij een audio opname plaats zal vinden.

De respondenten per platform dienen aan de volgende eisen te voldoen;

- 1. Werken bij één van de volgende platformen:
 - a. Fiverr.*
 - b. Upwork.**
- 2. Minimaal 1 jaar werkzaam zijn bij de bovenstaande platformen.*

De resultaten van het onderzoeken worden geanonimiseerd verwerkt en indien gewenst zal het uiteindelijke onderzoek met degene worden gedeeld. Graag zou ik zo snel mogelijk in contact met je willen komen, de einddatum is 20 april 2023.

Stuur mij alsjeblieft een DM met je gegevens.

Bedankt alvast!

In English:

Dear,

I am currently studying master's degree in Business Process Management and ICT and am conducting a qualitative graduation research project on gig workers (self-employed/flex workers) working on algorithmically driven platforms. For this, I am looking for at least 2 respondents to conduct an interview by phone or video call where an audio recording will take place.

Respondents for each platform should meet the following requirements;

- 1. Work at one of the following platforms:
 - a. Fiverr.*
 - b. Upwork.**
- 2. At least 1 year of working experience at the above platforms.*

The results of the research will be processed anonymously and if desired, the final research will be shared with the person. I would like to get in touch with you as soon as possible, the end date is 20th of April 2023.

Please send me a DM with your details.

Thanks in advance!

Message on Fiverr

In het Nederlands:

Beste,

Ik volg een masteropleiding en voer een afstudeeronderzoek uit naar gig workers. Zou jij mee kunnen/willen werken aan een interview? Het wordt via Zoom gehouden en duurt max. 30 minuten waarvan een opname wordt gemaakt. Jouw gegevens worden dan geanonimiseerd en niet gedeeld. Bij voorbaat dank!



In English:

Dear,

I am studying for a master's degree and conducting a thesis research on gig workers. Could/would you like to participate in an interview? It will be held via Zoom and will last up to 30 minutes of which a recording will be made. Your data will then be anonymised and not shared. Thank you in advance!

Appendix 7 Customer feedback given to gig workers

Customer feedback given to gig workers used in the word cloud.

Gig worker 1	Gig worker 2	Gig worker 3	Gig worker 4	Gig worker 5	Gig worker 6	Gig worker 7	Gig worker 8	Gig worker 9	Gig worker 10
is a true professional. Good voiceover voice, professional and super fast in terms of delivery. We will be happy to continue using him for our voiceover and IVR needs.	Always a very professional cooperation, thanks .	Highly recommended	very happy with the results	Top tier work as always! My third time ordering from , and I've been consistently satisfied!	Once again, absolutly perfect work from .	Great! No question was too much, and he's here to help you. I needed to change some point on my website several times and he helped me right away.	great to work with!	Knowledgeable, Fast and Efficient. Was great to work with and explained things clearly. Look forward to doing business again!	Excellent communication. Very professional. knows how to properly debrief to make sure we both are 100% aligned on what result is needed. Clear messaging during the project and commitment to 100% satisfaction. Recommended.
Was a pleasure!	Did exactly what I asked for. In 1 word: Perfect!	awesome great work ! Looking forward to our longterm partnership.	for a niche software solution like ours. she understands the key business jargon and created original great content for us. we will sure will come back for more.	Super helpful and great to work with. Thank you	Great work and quick turnaround time too, thank you!	Good seller, listens en try his best to adapt to whatever it is you need.	It was again a very good experience working with and his team. Together we've made so much progress in the development of my game that we're now almost ready to launch. I'll for sure use their knowledge in the future again and highly recommend working with them.	Great experience, we had some questions regarding our fiber connections and received the answers really quickly!	Just perfect!
Always very clear in communication and the results are outstanding as always. Thanks.	Fine contact had easy communication and professional	was great, good communication and also explained everything she did so i can get to understand the work also.	Perfect in all aspects	Absolutely perfect work! Such a nice guys I love it  Thanks bro 	Awesome work and communication !	is a great professional , so easy to work. Everything on point. Highly recommend ed.	and his team are extremely professional. I was impressed by level of communication and quality that they've delivered. They respected our decisions and also suggested new and creative approaches to our project. I will certainly work with them again in the future. Thanks!	He figured it out with a couple of paragraphs description. No thanks to my ISP, BIG THANKS to this guy!	She is a real pro. She delivers more than expected and has great instincts. I can't think of what she could do better.
Good voice-over and great service	Good communication fine contact had and thinks well with me. Is quick with indicated adjustments and gives a broader picture of what else is possible.	Nice Work!!	Very nice seller. delivers excellent work. The best copywriter you can get!	Always a pleasure my man!	IS ABSOLUTELY INCREDIBLE! HIS TALENT AND HEART AND ATTENTION TO DETAIL IS AMAZING! ABSOLUTELY STUNNED BY HOW AMAZING HE IS! TURNED A SIMPLE HUMM INTO THE MOST AMAZING MASTERPIECE! ABSOLUTE LEGEND! PLEASE WORK WITH HIM ABSOLUTELY DELIVERED STELLAR WORK! EXTREMELY HAPPY!	Fast and delivers top quality!	I am delighted to write a glowing review for and his team at EasySee for their exceptional development services. They recently worked on an exciting project for immersive tourism, developing a WebXR interface, and I must say that their expertise and dedication to the project were impressive. From the initial consultation to the final delivery, and his team demonstrated a high level of professionalism and technical competence. They listened carefully to our requirements, and their ability to translate our ideas into a functional and visually	is awesome	Awesome voice. Absolutely amazing experience. has such a talent! I highly recommend her to any person who needs professional singer or female voice over. Love it!!!!

							appealing WebXR interface was simply outstanding.		
Thanks again!	Second time working with , again super satisfied!	Highly recommended	Super, she really understands what I was looking for.	Great work	Absolutely great	analytical, creative and a true professional ! #secondtime	excellent service. Took extra time to fully understand requirements.	was extremely helpful and an absolute pleasure to work with. I would absolutely use his services again. I really, really appreciate all his help. Allowed me to move my services from Godaddy directly to Office365. A+ Thank you, .	I had a challenging project that need the touch of a very creative singer. I'm glad I was able to find . She not only sang the song beautifully, but was also very understanding, patient, and accommodating.
Super! Thanks.	This is our 3rd project with . We are very happy with his work.	Always helpful!	Super nice to work with.	, I want to thank you very much for your service. Edit turned out very nice, thanks for the smooth handling. Maybe until next time.	Without doubt this was a perfect match with what I imagined and the composition made for my podcast. Very happy with the result! Highly recommended! Thanks, .	Fine!!! Delivers excellent work and looks just beyond the agreed upon scope!	Very professional and detailed.	Perfect, Best Knowledgeable...	It was an absolute blast to work with ! For this project she hit the tone of voice spot on, also she was very quick in the delivery :) 11/10 would order this gig again!
She did amazing work, responded very quickly to messages and understood the assignment! the delivery date was met.	Fast turnaround and neat work delivered !	was incredibly helpful in optimising the SEO of my webpage. She delivered the product with a detailed description of the changes made and a comprehensive explanation of how the changes will improve the visibility of the website. Highly recommended!	Great content writer, with perfect SEO scores.	Good communication, nice result : D	always delivers on time with excellent quality.	very happy with the result!	Nice interaction, able to accomodate special requests. Overall a great experience and will definitely work again with them for future projects.	is very knowledgeable about the Mikrotik router we were working on and appears to know about lots of other routers as well. He did the configuration of the router that i was having issues with and setup some recommended good-practice rules. I have no hesitation to recommend him for your network needs. Thanks	excellent delivery, properly separated tracks and segments so our producer has everything he needs for the final mix. Beautiful voice, very professional.
fast response	Excellent	Good experience. Good communication I know the work she did won't show for a couple weeks but I'm confident she has done a good job. I will be back	I thought it would sound a bit more professional a added spin to the wording. But the layout and style was great.	I would give 10 stars out of 5 if I could! He turned my amateur drone shots with his transitions, background music and graphics edit skills into a professional promotion video for my 4x4 adventure travel company Maple Overland in BC, Canada. I would definitely work again with him in the near future. Thanks again !	I have been working with this seller for a year now, and every interaction is superb!	Thanks for the beautiful website!	Working with went very smoothly and the delivery date was sooner than expected. It was easy to get and be in contact with him. If there was something that I wanted to change, he made it happen.	Super helpful to get a chance to work with . Additionally, he was patient and flexible with the hoops we had to jump through working remotely.	on time, and excellent! we had a 'wow' experience..

fast response	listens/reads what you aks thoroughly and interacts quickly. Happy to work with him and can recommend him!	perfect , thanks	Writes all our Dutch blogs. Great writer and works fast.	Great service from	Very pleased with the results. Thanks for you effort.	One of the best service I have received definitely recommend ed if you want a site 🙌	Working with went very smoothly and the delivery date was sooner than expected. It was easy to get and be in contact with him. If there was something that I wanted to change, he made it happen.	Excellent on all levels.	Always does a great job for us.
Good and fast service!	Again, great work, nice communication!	regular customer here :-), thank you	Fast delivery and quick communication!	Quick turnaround and professional delivery.	Fantastic repeat service from . Great turn around and development on the finished piece.	Always great service and on time. The communication is direct and clear.	This guys are the best. Have been working with them on a long term project for past few months. The best experience ever!	Incredibly helpful and knowledgable, got everything up and running for me in less than a day and made the process super easy.	Fantastic! Very happy with the hands-on and professional work of .
delivered a very professional service with a great outcome. The communication was fast and very friendly. Definitely recommend.	Very happy with the logo. Fast delivery and communication.	Very helpful for those who dont know anything about SEO. She explains it and delivers as promised. Will work with her again.	Very nice cooperation with	Good as usual! :)	Very happy with the results. The music is lovely, it's super calming :)	Good communication and good work done!	Awesome team!	From initial contact to completion, really very competent, fast and friendly support, as you would wish. If I had known before, I could have saved myself MANY unnecessary hours. I can definitely recommend his professional service to everyone and look forward to the next time I need it! Let's keep in touch! :-)	it was nice working with you. we are very happy with the result.
Absolutely great experience! Wonderful quality and pleasant communication, would highly recommend to anyone!	Nice design and quick delivery. Communication was also pleasant with .	Terrific work. knows her stuff!	Fine collaboration.	Amazing job. I will order again and again	Used many times; always a pleasure.	Good Job and good communication.	Great work as always!	Knowledgeable & Excellent Communication Service	Just listen to the result, performed a classical 5-voice contrapuntal work flawlessly.
The delivery was super fast after very pleasant communication with . Our client was satisfied with the end result, which is all that matters!	is very quick and gets to know you as a customer. Fine collaboration.	She is fantastic and a delight to work with. Highly recommend!	I am very satisfied with final delivery of blog article	Highly recommend!	Thanks for your quick and high quality service! Will order again for sure. This is the best piano service I ever ordered on fiverr. Thanks again !	Clear communication and helpful	Awesome team to work with. No complains. Happy to continue working with them.	helped me with Unifi setup. He knows his stuff, and made it so easy. I recommend him 100% for your needs.	I love the outcome. Super dope !
Pleasant cooperation	Good thinking, class delivery and great design!	Good work and clear explanations	Thanks! Looks good	Bro never misses	Delivery on time, great communication with seller, highly recommended ! As always Thank You !!	As always, quick response and fast delivery!	best experience with ! very skilled and professional. He really puts his all into your project as if it was his own. we look forward to working with you again 😊	Multi-tenant GoDaddy defederation / migration order. Very clear and understandable communication during	Straight forward and simple.

								project scope and delivery. Performed all aspects related to this order with no data loss and no downtime. Order completed promptly and with 100% success / quality. Seller provided review of security concerns / risks and suggested remediation path. Highly recommended !	
Great job!!! Super fast delivery. Quick and fluid communication throughout the whole work process.	Very good experience with . Despite my "poor" communication skills, was able to put down exactly what I was looking for. I received quick responses (always within 30 minutes) and good feedback. was very thoughtful and it seemed to me to be more working with than working for. All in all top!	, what a knowledgeable person with regards to SEO! I asked several questions and received answers promptly, with detailed explanation and in a language a low-tech person would understand. has been Very Helpful in Guiding me to Optimize my website and to make it easily found by search engines. Thanks to , the keyword research to know how people are asking questions on google search to find answers and adding Schema to my website has to be the best decision I made for my website and I am happy with the service I received. , thank you for sharing your knowledge and for helping me optimize my website! Keep up with your Great Service!	best content writer	This is the second video he has done for me! That alone shows he does a great job!	Always a pleasure to work with .	Clear, fast and confidential. I got a beautiful website completely to my liking!	We have done multiple projects together alongside with this project, everytime the results exceeded my expectations amazing skills of and his team. Highly recommended.	amazing dude!!	The communication with is great, she's fast in answering and making changes!
great as always!	Couldn't be happier with the results and how we got to the results.... I would highly recommend and I will certainly be contracting him again for future projects. :-)	She is the best!	writes all our blog posts for the Netherlands with SurferSEO. We are very satisfied with her work.	Always a pleasure working with him, goes above and beyond!	The more I work with the more he reaches the depth of emotion and beauty of music. Absolutely beautiful. Great communication, awesome service. Highly recommended for any of your projects. Thank you so much.	Very quick response to messages, good and fast handling.	Amazing team! Happy to work with and his team. Very responsive, keep you updated on progress, offer suggestions and improvements.	Very knowledgeable and service fee is very reasonable. I will definitely recommend to anyone who looking for Azure related services.	Very good work and fast response times when it comes to changes needed
Perfectly spoken by our instructions.	Really good experience and communication	The seller was prompt and responsive and delivered as promised. I look forward to seeing the long term benefits of the work done.	Top designer, very satisfied with the result! Our company needed a flyer for a new marketing campaign. Within a day we received a super tight flyer. After a short evaluation round the beautiful end result was soon there. Great communication and highly recommended for anyone looking for a designer to create a professional flyer!	Great seller! Very communicative and easy to talk to. Provided a clean video and captured the vision I had in mind. I will use exclusively for my video edited.	Thank You for wonderful gigs...As always outstanding work !	Clear communication, excellent delivery and definitely recommend !	Thank you for fast and professional help! We'll definitely work in the future again!	Amazing.. understood the problem and fixed a few other things I wasn't aware of. I will definitely use again	I'm a repeat customer and will plan on having do all of our photoshop gigs

Fast and professional	Really simple especially for a new comer to FIVERR	is the best. Communication was great, price was reasonable and she was very professional through the whole process. If you are considering SEO services don't think twice about hiring just do it! You will be happy with your decision.	Best contentwriter !!	Great communication and work, I recommend for your next project!	I've worked with before. And his professionalism made me return. Once again, great job! Thanks,	Always a good experience with this seller	Very knowledgeable and creative team! Will definitely continue working with them!	He is a professional and charges by the hour so you don't waste time and listen quickly	Great experience! The order of recording a TVC jingle was a bit unusual, but responded to the task immediately and understood the assignment without lengthy explanation cycles. She assured that the end result will be exactly like the original and it really was perfectly executed. Plus, sound mixing and mastering in the package is a HUGE bonus! 5 out of 5 :)
Great working with her, very fast communication and clear voice! Highly recommend her for any project you're working on.	Great communication, fast response fair pricing.	Great job and the service and communication has been outstanding. Results were promised and delivered. Matt	very good writer	Perfect, thank you so much!	Great communication, awesome service, outstanding delivery ! Thank You !	Perfect great guy, nice to work with. Came back for several times now and will come back again 😊👍	Very professional.	is nice and easy to work with! Very accommodating.	This is my second order with and it will not be the last Both pieces of work she has done for me have exceeded expectations. Thank you
Super, thanks	Once again did a great job on a logo for one of our companies. Good communication and finding solutions together. also thinks along with us about concepts and dares to be honest when something is "too much". In short, highly recommended for any kind of logo design!	The seller is a true expert to the of the subject, took her time to understand the real problem and did a deep diagnosis to find out exactly what are the issues and fixed all of it. Not only that but she went extra mile to suggest for the future plans in order to the site to full SEO optimized. Really gives me piece of mind working with someone who is willing to above and beyond to deliver the best results.	good writer	Great work , great communication and will definitely use for future orders	Hi , Thanks so much. It is not only a beautiful song – but truly magical. I cannot wait for the next project.	Great express	Very professional.	Fantastic work! I recently reached out to help with migrating one of my clients from 123-reg office 365 to our own 365 tenant and he provided an outstanding service. Work was quickly done and efficiently. Very helpful, friendly and great to work with, won't be looking anywhere else for future needs.	Wow, that was the easiest experience on Fiverr yet! Right from the off, got exactly what I was after and for me, she nailed it! Thank you so much Highly recommended!!
I like her voice!	Fast delivery, good listening to my wishes and fine communication. Thanks, !	is worth every single penny! If you're umming and aghing, just do it! Best money I ever spent. Already serious improvements have been made and this is only set to improve over the coming months. The report you get on what changes have been made at the end is so thorough , you can see that considerable time has been spent on the project. Absolutely will be recommending to anyone who even mentions SEO to me. Thank you so much!	tried hard to design the layout of my cv. I really appreciate it.	Such a great seller, Did way better then I could have imagined, would definitely recommend. Thanks again my man!!	As always awesome delivery ! Thank you !	Great seller, always very helpful! Knows exactly what I need without to many words! The only reason I wouldn't recommend him to	is great to work with. Excellent communication and attention to detail. Thank you!	This guy ist just awesome. Communication was always easy and efficient, really friendly person. He has a deep knowledge and understanding of what he does and explains everything really well. Helps you through the process step-by-step if needed and answers	Fast, Flexible and Fun :-)

						anyone else is because I'm afraid they would steal him away from me, haha!		all of your questions. Definitely recommend him and will work with him in the near future again. Thank you :)	
Top service. We are very happy with the result. Thank you!	Sir, was good with communication. Delivery was very fast and very much to my liking. Definitely highly recommended!	is a top-notch SEO optimizer! Prior to working together, she reviewed my website and gave me a detailed proposal of how she would complete the job. Before working with her, my website could not be found on Google. Now my website is easily found on Google and runs much faster. answered all my questions and when I did not understand a response she patiently offered "layman's terms." Additionally, went above and beyond her proposal. When I needed some additional tweaks to my website, she did them enthusiastically and professionally. I highly recommend working with !!!	Easy and fantastically communicated content. A total breeze.	Great work! I highly recommend	was clear in his communication and delivered an amazing jingle! Highly recommended!	Super happy with the result!	The work was very professional and exceeded my expectations, highly recommended, absolutely will be my first option for any future projects.	helped me troubleshoot connecting my new fiber internet connection to my UDM Pro and also helped me to get my UNVR to update. As always it was great working with him.	Thoroughly enjoyed working with . Professional, communicative, and so immensely talented. Her voice sparkles. She also gives 100% into the project. I can't recommend highly enough.
Very quick response and settlement. Totally satisfied!	listened well to our wishes and adjusted the design if necessary. Good communication and fast delivery, even in case of a setback, there is clear communication. Highly recommended!	This is exactly what the site needed, and I plan on continuing to have do site improvements. Thanks for the help!	top schrijver!	Great service, attentive to satisfy the customer 🙏	Delivered on time with what I asked for! Great product!	Very satisfied with our order. communication is top notch and he thinks well with you.	Really great work again! Best agency for software development on fiverr! Thanks!	is very knowledgeable person. He researched a lot and troubleshooted my issue! Will continue working with him!	Over the moon with the final result, thank you so much for being patient and understanding as always, you are a joy to work with.
Seller was very fast and delivered exactly what we needed. Also great voice, wow!	was incredibly quick in answering my questions. He was also prepared to go a step further than expected to achieve the best result. Very satisfied!	good service and very good communication.	Very efficient. Delivered ahead of schedule.	JUST BE READY FOR THE NEXT ONES IMMA HIT U WIT 🙏	did an excellent job with my review and even accommodated changes all in a timely manner	Super service again	The seller gave very useful advices and also helped me to solve all the problems I had. Very happy with the consulting and tutoring session.	1) Professional 2) Really knowledgeable 3) Perfect fit with my needs For sure will do again business with him	She did phenomenal work as always, I am more than satisfied and look forward to working with her again.
All positive vibes when I worked together with . I work with a lot of voiceover artists and she was fantastic to work with. I highly recommend her service. She helped us with a	As always top-notch delivery!	Very thorough, structured and analytical. It was impressive to see how many aspects of SEO was able to improve in a relative short time. We are truly thankful for her excellent performance that will no doubt help the visibility of our website going forward. Thank you !	Super snel en doet wat je vraagt	Goede communicatie, mooi resultaat!	As always, thank you for awesome delivery.	Amazing service, so helpful and understanding of my vision of the website I wanted to create. I would highly recommend !	A great Project with a great Team! Top-Job! Thanks a lot! Really great Developer for Unity!	is quick and able and he'll figure it out.	It's amazing thank you so much, always a pleasure working with you. :)

voiceover for a video animation explainer. Thanks again, !									
As always very quick, very professional and delivered as promised.	Top service, cooperative and thoughtful.	Easy and straight forward. gets her work done very professionally. I'll definitely come back to her again.	Simply the best .	Great Service and price! would highly recommend!!!	Working with was a great experience from start to finish. I asked to compose an intro and outro theme that I could use for my streams and highlight videos. As part of the requirements process, I gave a basic MP3 with a core melody. Even though the theme that I provided lacked bass, percussion, or any other supporting instruments, took the MP3 and completely nailed the vibe I wanted to feel. When it came to revisions, was 100% responsive to my feedback. The attention to detail and timeliness of responses showed a clear commitment to providing a high-quality product on time. 5/5 on all levels!	Thank you for the great work! Good communication!	It is rare to find sellers of with this level of technical skill and also this level of clear and detailed communication. We are about step into a large project together and this first step was to design and map a WebXR project. We already have plans to continue this work together. Thanks .	it was great fix my wifi speed capsman mikrotik no problem	It was great working with . She immediately understood what we wanted and created amazing photos. Communication was perfect as well.
Quick response and delivery. Very happy with the results.	Liked that the seller communicated in Dutch!	Fantastic and professional work by . I can recommend the great service 100%.	I needed a motivational letter that had a tight deadline, was able to deliver exactly what I needed within the time as well. I will def be working with her in the future.	He is sick asf	created a nice intro for my podcast, just what I needed, thank you very much for that, excellent job.	Heavily satisfied	Awesome work, thank you!	Very knowledgeable, thorough, and quick. Will work with you again.	Very happy and I love the final product. xx
Great collaboration	Neat logo, delivered quickly, straight to the point.	Excellent work. I am very pleased. Gives a breakdown of website statistics prior to her SEO work as compared to after so you know exactly what was worked on and how it affected the optimization of the site!	Good and quick service.	is fast and responsive, spot on what I would like him to edit. Really happy with the output.	Fantastic Products - This seller listened to my initial ideas and hit it right on the target - Timely and Great Quality!	Loved working with . He is a very capable website-builder	Amazing quality and service! highly recommended!	always good experience! awesome to work with!	Amazing! I'm so pleased with the final product, thank you so much.
Thank you so much	Straight to the point, great design, fast delivery.	Truly exceptional. I am delighted with work	Well listened to what I was looking for, and happy with the end result.	Yooo that shit firrreee !!!	As a returning client, expectations are mainly based on the experience from the first time working with a Seller... for some reason, getting a repeat experience from others turned out less in quality than before... with he does a "how do I meet the Buyer's vision and then add creative touches to make the project worthwhile" type of approach that worked. Also makes as much effort to communicate back, little things that mean a lot in the long run.	Super! Again and again.	Amazing work and excellent service!	The best, very professional and explained everything step by step, I recommend him	She's absolute dream to work with, I look forward to working with her more.
delivered a high-quality voice over very quickly! No fuss, script	is very kind, has good quality skills that are needed when creating a logo. Thank you for the nice and good	Everything went well! :-)	Quick response and value for money!	Great work and wonderful experience. The communication was just great	Thank you Rudy for another outstanding delivery!!!!	Very good!!!	Excellent quality and professional service!	again speedy delivery and fixed my vpn issue.	Goede kwaliteit, communicatief, behulpzaam, komt afspraken na. 5/5 Zeker aanrader!

delivered with a direction I wanted to go in. Within 2 days, she had responded with voice over in .wav format. Definitely highly recommended. Thanks !	cooperation. I recommend to anyone who wants a high-quality logo. Do you need a logo? Take Krijgsman								
Underpromise Overdeliver. Much faster than expected!	Very understanding and delivers nice quality	Very smooth and efficient	Fast delivery	Beautiful collaboration	A great and exceptional job! The result is stunning!	Thanks again	Very professional and very kind!	Thank you so much	To work with was on a very professional level. Fast response, great voice, has the ability to connect to the customers need. Great job.
Thanks ! Good and quick service as always	s services are very good. He gives tips and shows adjustments quickly if there is a need. The more specific you are the better can work on a logo. He delivers quickly and well.	Her work is unbelievable good! Very detailed explanation. A wonderful help! The SEO work is done with so much responsibility and effort. We are so happy to find this company!	Exactly what is requested	Too fire🔥🔥🔥	Thank you for another outstanding delivery !	Happy again	I highly recommend working with . His assistance was invaluable while working on my project. , , and brought my vision to life. This team is dependable and hardworking. The team is top notch. I look forward to using services for future projects!	Excellent knowledge of all things Azure	I asked for a piece quite apart from what she usually (seems) to do. A 5 part choral piece, and she did so absolutely beautifully.
Great work, again!	I asked for a basic logo design created on the basis of a small sketch i had drawn. made a logo that suited my imagination, and even further. Communication and structure on the deal was awesome. Big recommendation from me!	very detailed work	She is fast, good and communicates well.	Very good communication, he understands very quickly, is very friendly and gets the job done, I will definitely order again 🙌😊👍👏	It is a pleasure working with . His communication and his skills are very good!	Thank you very much again	Excellent quality and service!	Excellent, very helpful and nice	Oh yeah! Amazing work, again!
Great voice, super fast service and professional delivery. Thanks!	Excellent communication once again. Very patient...	is great. Very timely and detailed. We have done SEO work with before and this project was about setting up Analytics. She delivered the work on time and as expected.	Great service	First experience with is good. Delivers top work and meets our expectations.	is always a pleasure to work with; prompt, efficient, and with very high quality.	Good communication and fast delivery.	Another amazing project complete. Thank you and Dev team, You're the best!	Great seller. He was very a good experience.	Amazing! Thank you so much, . Always a pleasure to work with you!
was very quick in responding and understanding what we needed. She did a voice over for us in Dutch,	adjusts all questions and is very professional.	does outstanding work and I've seen results. Hire her, you won't be wrong!	Snelle en kwalitatieve levering	great work! thx	I really enjoyed working with. The communication was great and very fast! Even though I delivered terrible sound, he still managed to make something out of it and he thought along with me :) The collaboration will definitely be continued.	As always, great communication and quick response.	Easily the best programmer I've seen on here.	He is amazing to deal with. Very professional and knowledgeable. Would absolutely recommend to others and will use his services again in the future.	Amazing as always, thank you !

English and even in German in which we were very impressed by her. We are a very happy client!									
Very satisfied with the delivery and help offered us. Would definitely recommend her. She delivered a lot faster as we expected and responds very quick if there are any questions.	is an excellent communicator and knows what he is doing. Very fast delivery, high quality! its a no brainer to work with such professionals. See you soon!	Nice work. Thanks!	Very good quality articles	Far beyond what I expected, this is exactly what I needed. You secured a repeat customer for sure!	Thank You for awesome work !!!	Super service and always ready to help	Exceptional work super communicative would suggest to others instantly	awesome work !!!	High quality, professional and very communicative. Would definitely recommend working with this amazing girl!
Nice and quick delivery!	quick and quality good listener	Again superrrrr work done thanks.	Very satisfied with the deliveries!	Definitely brought my vision into reality will not hesitate to collab on future projects.	Super!!! Contact was very good and the finished product great. Some minor changes in revisions were no problem and super smooth. Highly recommended!	Great to work with .	Went above and beyond my expectations, and executed the task flawlessly. You are paying for pure quality if you choose to work with .	Great help, thank you!	Earlier than promised. High quality. A seller with integrity.
Very pleased to work with. Professional and delivers quickly. We used her services to record the welcome text and voicemail for our switchboard.	I ordered a logo and was amazed over his quick and swift reponses to any question. Within one day marvelous work was delivered! Thanks and I definately would recommend him for any future work. I defintely will do so. Thanks	Great job. Thank you	We always come back to her!	Delivered very good work for a good price! Communication was clear and fast, definitely recommend for all kinds of videos!	He did a wonderful job. Thank you.	Great job	Highly professional with excellent work. Will do business again, very satisfied!	Very knowledgeable and help solve the issue, and explain the reason for the cause as well. Double checked, and ensured everything was sorted before signing off. Would highly recommend.	I am amazed at how well my photo turned out. Not to say that I was not confident in skills, but she executed with complete precision. communicated well with me to gather the details needed to capture my vision, and she exceeded all standards. Very pleased. Highly recommend.
Fast and friendly, great voiceover :)	Very responsive. Knows intuitively what you want...	Well done. Every moment again	fast and fully satisfactory	thanks bro, it's perfect as it is...thanks a lot for your patience...I'll come back with other videos	As always A++.. Thank you for yet another awesome delivery :)	Perfect result	is an awesome person to work with. Very helpful when I had no clue what I was doing while setting up my project and good communication.	is very helpful and was able to resolve our networking issues quickly and shared his knowledge which I appreciate. Look forward to working together again	Fantastic
The best! Thanks	I could not give al lot to work with but he still managed to give me something great.	Great service! Thank you	Very creative writer!	I mean, overrated in my opinion	Wow! is a very gifted composer who is able to listen to his client and create the perfect music. His communications with me were of the highest grade and would be happy to work with him again. Feel comfortable ordering from is music master.	Top work, delivered quickly and I am very happy with the result	It's a pleasure to work with . He delivers on time without any issues even on short notice or on a tight deadline.	was great work with. I trusted him to the fullest and explained everything every step of the way. I have more for to do!	Fabulous work. Thank you so much!

Amazing voice and very good understanding of what I want!	Fast & pleasant communication	I like that generates a report explaining the diagnostic and the changes she applies. This is very helpful.	Professional and creative!	This was great thank you	It's amazing intro my new podcast. I love it. Definitely will be apart of my team for my podcast introductions.	Thank you and I will be back for sure..	Perfectly	Excellent service.	My go-to artist for all Photoshop editing. Agency-level delivery of working files.
Cooperation was excellent. Quick response, quick delivery. Voice matches very well with content. Recommend!	very good good communication very clear he always wants to help you	Very nice work done	Fast and quality	Im very happy with the result he was good in his communication and I'm he did a great job so I really recommend him !!	Good communication, fast delivery and very happy with the result!	Above all, he is knowledgeable, patient and kind. I am very happy with the result	Thank you	Knowledgeable, professional, swift, good communication, and reliable. I asked him to access the wp plugins directory to disable a specific plugin as it was causing the website to crash. I would love to work with him for the long term Thank you.	Very helpful and great communication throughout the project (and before). Very happy with the result!
Fast and professional.	Perfec result, very happy!	is easy to work with, communicates well, answers questions, and produces quality work. The work was done on time and is well documented. My SEO score is already better and I will need to wait to see how much better it will get over time as google reads it again.	Great seller	I like to work with . I think he's very good in simple video's.	Awesome as always.. the seller is beyond anything words can describe.. this is my third order.. keep up the good job my bro .. 100 stars..	work is great and he has helped us shape our vision in a user-friendly way. Communication was easy, fast and friendly. We recommend him to anyone who wants to rely on a dedicated person for website design.	There was lack due the copartner, but this guy made everything always in time. I will reorder for sure!	has huge amount of experience and skillset with Cloud related technologies, and in other different areas. He was able to troubleshoot the issue and advised our team in the best way possible. We definitely recommend him.	Always a professional and pleasant experience
I have worked with a few times already. Every time the result has been perfect, delivered fast and professionally . I can definitely recommend working with her. Top-notch service!	Top designer! Pleasant contact and he has already received the follow-up order from us.	did a great job in a timely manner. I liked how she sent a detailed report of everything that she did. Very happy and would definitely use her again.	High quality, fast delivery!	Delivered exactly what we were looking for. Very clear communication and quick delivery. Also very flexible in quick adjustments. Definitely recommend!	He quickly understood what we needed, produced it quickly and also created a shorter version for us. Simply wonderful!	Very fast, communication both in English and Dutch, knowledgeable of any tasks surrounding the new website.	Great work as always!	Will definitely order again	Responsive and accommodating. A true talent and joy to deal with. Will use again.
Fast and easy order. Soothing voice and fast	was very quick to respond and thought along with us. Above	Great job! Thank you!	Very nice! Keeps appointments well. Definitely recommend!	Perfect, thank you!	Oh I love it!! thank you so much!	It was great working with , he captured	was able to solve my problem quickly and efficiently. Looking forward to working with him again in the future. Great job!	Great communication. Was able to pinpoint the problem with my Unify AP not working	Amazing work! Great communication!

to get in contact with for revisions. Thanks !	expectations, he delivered the result super fast. Very happy with it!					everything we wanted. Awesome and professional work!!!		and provide a solution for it. Highly recommended.	
Always does what is asked and delivers quality. Worth repeating.	Nice communication and service again.	Easy to work with.	Super clear communication and on time delivery! Happy with the results!	Thanks !	Absolutely AWESOME! Couldn't recommend enough! As a musician I knew exactly what I wanted but had struggled to find anyone who 'got it' The first draft sent over was absolutely bang on! Brilliant!	awesome work, easy to talk with, good price, an good quality.	Second project that I did with the help of , the communication is smooth and delivery on time.	Best unifi tech support out there!!!	It was my first fiverr transaction, and made it a painless and very pleasant experience. Was very happy with her work and there was just minor adjustments based on my own personal preference, which she happily obliged and went above and beyond to provide. Will definitely work with her again in the future! Thanks,
Thanks again! Great work as ever.	Quick response and good interactive communication. First time right! Which deserves to be mentioned Delivery within 24hours in my case , which is extremely fast and has well outperformed my expectations. Will do business again!	was very easy to work with and she knows what she's doing.	I am very pleased with the result! She rewrote a cover letter for me to make it more readable and grammatically correct. She took the content 100% and even improved it. Overall delivery was very fast. All in all, a really presentable final product. I can simply recommend her.	Thank you once again for your great service	Excellent as always! A true talent to work with.	Amazing work, very satisfied. For sure soon another cooperation .	does great work and was a pleasure to work with.	Great experience with . He helped me get everything done that I asked, and quickly.	It was a pleasure working with her great service and great force definitely going to with her more in the future.
was great to work with, quality was amazing and the communication was excellent.	From the start I was happy with my decision to collaborate with . is a true professional. Communication is quick, clear and thinking along with every step or request from my part. I am really happy with the result delivered, so apart from the communication, his qualities are outstanding. I will definitely collaborate again very soon!	The seller was very professional, explained everything as easy as possible, and did an amazing job.	Super- Provisional party. I am very satisfied.	I appreciate everything you have done gave my video life you are very talented, and I will be back for more of your excellent work thank you so much	Great Job ! Thank you !	did everything we needed for the website and did an excellent job. was very accommodating and we had a lot of requests yet was very patient! 10/10 would recommend again!	Great communication, very organized, and can quickly execute complex video game coding functions! With help, our project's timelines have been greatly accelerated. Will definitely continue to collaborate & look forward to future creations!	Absolutely brilliant, i was trying to solve the same problem for two days and just couldn't get anywhere with what i could find on youtube or forums, He quickly solved my problem and helped me understand my mistakes and how to manage the issue in the future.	The seller is very talented. I provided her with a basic concept of what I was looking for and yet again she created amazing vocals and music. Thank you

I have already had tapes recorded at my IVR several times. Highly recommended!	Delivers top work. Contributes ideas on how and what to do.	Return customer with high satisfaction for efficiency and quality. Thank you!	thanks again great job	Better than I was expecting! I am very satisfied with the kind and gentle reply and communication! Thank you so much for making the best work! It was a fantastic job! It was a pleasure working with you! Definitely I will order again I film the videos with a iPhone 12 in very bad conditions but make a real artwork with it	Always excellent service, quality and speed.	Great service, very satisfied. Definitely working together again in the near future.	is one of the most brilliant person I worked with. We were experiencing some bugs with AR experiences, and he proactively suggested many ways to solve that, and contribute to the development efficiently. I will look forward to involving him in the project in the near future. Kind and friendly person.	Great experience with helping me troubleshoot my issue. He completed the task very quickly.	I really enjoyed working with this seller. Her passion for her music speaks for itself, she created beautiful vocals for my nursery rhyme. Thank you
Awesome work, fast delivery and excellent audio quality!	is a smart design	great work, very detailed - improved my site speed. will continue having do work from time to time	Great to work with!	My clients love the edits we are able to put together. You will not be disappointed when using this seller. Quick Turnaround, great service.	Super easy to work with . I come from a music background myself and play guitar. Analyzing musical compositions is something I'm used to doing, but likely could never create my own music (especially in a genre I don't play much). I was very impressed by the final product especially since it lined up with my expectations entirely.	Great service! Great website! I will use again.	Excellent	Excellent	reacted very fast, understood what was needed and delivered faster than light.

Appendix 8 Gig worker feedback given to customers

Gig worker feedback given to customers used in the word cloud.

Customer 1	Customer 2	Customer 3	Customer 4	Customer 5	Customer 6	Customer 7	Customer 8	Customer 9	Customer 10
Outstanding experience!	Its an honor for me to work with you	Thanks for the pleasant cooperation!	thank u	Wonderful	Friendly and professional buyer!	Great experience !	Always a pleasure! :)	thank you.	Fantastic!
Thanks for the order :) Awesome buyer :) Great experience :) Thanks again for choosing me and a big thanks for the generous tip :)	as always we made awesome project. Great Buyer	Thanks for the order!	Another Great Experience ♡	Great Experience!!!	Great experience	Great experience . Looking forward to another opportunity to collaborate.	Great experience!	Always a pleasure with this five star professional ! :)	Always a pleasure!
It was a great experience working with Patrick! 🍷	Thanks for ordering	Thanks again!	My Best Buyer ♡ Always A Pleasure Working With Him ♡	Very detailed and organized information. Thanks!	Friendly and professional.	Thank you!	Great experience	thank you..	A pleasure to work with as always!
Outstanding experience!	Great experience with her	Great buyer! Nice communication.	great experience.	I want to thank you for liking my work. It was fun working with a client like you, I hope we can work on new projects in the future as well. Cheers	Always great experience. Thank you	Great experience . Quick and Clear. Thank you	Thank you	thank you.	Always a pleasure to work with you. Thank you!
Always happy to help!	It has been an absolute pleasure working with you! I love your products and hope to work with you again in the future!	Outstanding experience!	Great Buyer ♡ Great Experience As Always ♡	It was a pleasure to work with rosenliaa. Very nice and polite person.	Great working with Arshavin	Thank you!	nice experience	thank you best client	outstanding as always
Thank you for our great collaboration, Patrick! Hope to work together again sometime!	Thank you for ordering with me! I really enjoyed working with you and this was such a fun project. See you next time :-)	great experience	Super bedankt! Erg tevreden met de DA en PA	Thank you for placing the order :) Your brief is quite detailed and it helped me to design the logo as per your expectations. Hope to work with you soon on your next assignment. All the best	great buyers	Outstanding experience !	A great fiverr buyer.	thanks.....	Outstanding experience!
Always a pleasure to work with!	thanks nice person	Thanks for another interesting order and pleasant collaboration!	My Favorite Buyer ♡ Another Great Experience ♡	Great Experience!!!	always great experience. Thanks	Thanks!	I am always happy to work with you! Many thanks. :)	thank you.	Great client, ever a pleasure to work with!
Another fun project! Hope to be able to help again!	Truly a great client. You communicated so clear and timely. Thanks a lot for the opportunity!	great experience	Nice communication!	It is a great experience working with you on this highly anticipated assignment to redesign your logo. Your brief was spot-on and each point	Best	Thank you!	Great experience	thank you.	Outstanding experience!

				has been helpful to create the best designs. I am sure that this new logo would add value to your brand. All the best					
Glad to meet pplaggenborg on fiverr! Looking forward to work with him again.	Working with her is a pleasure. Great Buyer	Very polite client with great product! Knows what he wants and is very clear and friendly. Would really recommend working with!	Outstanding experience. Thanks again	Amazing client	Thank you.....!!	Another great project	Always a pleasure working with Eugene. Thank you for your trust and repeat business. Until our next project together :)	Thank you so much for your kind words. Happy to collaborate on future projects :)	always a pleasure to work with you. Thank you.
Always a pleasure working with Patrick, as usual communication is clear and there's great reactivity on all feedback rounds! Highly recommend.	Always a pleasure to work with Seleena. Thank you so much!!	Outstanding experience!	Great experience with this buyer, friendly as well.	Great Experience!!!	Friendly and fast responding seller.	Great experience working with this buyer.	I appreciate the repeat business! Thank you for the order.	Best client.	Excellent always!
Great working with Patrick on an AI-creative project, instructions were clear and Patrick is very reactive. Highly recommend!	Great buyer with a really fun project	Very gentle and helpful .	My favourite buyer ♡	Perfect experience :)	Thank You Brother.....!!	Very kind buyer. Great experience .	a great experience working together, hope to work together again soon!	Best Client	fantastic as always!
So glad to work with pplaggenborg again! This time he come back with a lot more interesting project. So happy! :D	She is always an amazing and cooperative person. Thank you so much Seleena for your guidance. Looking forward to work with you again.	great experience	Outstanding experience. Thanks	Kind client	It was great	Another great project	A great client who is always welcome back. Looking forward to working together again soon.	Thank you.	Always a good experience! :)
Thank You :)	We made another project together. Great Buyer	Great collaboration!!	It was a pleasant collaboration ♡	Amazing client	Thank you Brother	Great experience ! Thank you :)	Thank you!!	Best Client	Pleasure as always!
Thank You :)	Thank you	Good Experience, Honest Buyer.	Amazing Person ♡ Great Communication ♡	Great Experience!!!	Thank you Brother.....	Clear instructions and excellent communication! Thank you!	Always a pleasure working with you!	Thank you.	Was a pleasure
Really great experience!	Seleena is really a great buyer. Always had lovely experiences working with her. Thank you so much!!	I am grateful to you for this beautiful cooperation...	Great experience with this buyer. Very friendly and open in the	You have just made to the list of my SUPER CLIENTS :) I must compliment your communication skill and a good eye for design. I am confident that this new logo would add value to your	Thank you its great working with you again.	Thanks again for another great experience .	Always a pleasure! His Glory	Thank you.	Amazing Experience! Pleasure to working with you Thank you so much

			communication.	brand. Looking forward to collaborate in the future. All the best :)					
Very nice person. Looking forward to working again in future	Excellent buyer! She provided me with a clear vision and a wealth of background information for her project. Professional, friendly, and courteous every step of the way. Highly recommend!	Thanks for another order & the pleasant cooperation!	Pleasure to Work With Hollandsch erp ♥	AMAZING EXPERIENCE	Always Great Experience. Thanks	Always a pleasure with his excellent buyer. Thank you!	Always a pleasure! Thank you so much! His Glory	Thank you so much! I will be happy to serve you again! :)	Thanks a lot.
Effective and fast communcation, very pleasant person!	Awesome Experience! She left me a tip!	Fine collaboration again!	Outstanding experience. Thank you	Superb experience :)	I'd recommend to anyone at anytime. Such a great personality to work with. Thank you again :)	Clear instructions and communication! Thank you!	Thank you!!	Thank you so much! I will be happy to serve you again! :)	What more can be said that hasn't already been said since the beginning of our collaboration: despite the distance, we form a team that rolls 😊 Looking forward to renewing this beautiful teamwork 🐝
It was absolute fun working with Patrick, highly recommend!	Great Buyer !	Great client to work with. Easy communication and friendly. Will be happy to work for any upcoming projects.	Nice to work with hollandsch erp ♥ Great Communication ♥	Outstanding experience	Thank you very much....!!	fun project.	Thank you!!	Thank you so much! I will be happy to serve you again! :)	A Great experience
Always a pleasure working on interesting projects with Patrick!	Thank you as always~!	Super!	Great Buyer ♥ Great Experience ♥	Perfect experience :)	Great working with	Outstanding experience !	A great long time client who is always welcome back. Hope to get the chance to work together again soon.	Thank you..	Was a pleasure
Outstanding Experience!	Outstanding experience. Always love to work with Seleena. Thank you so much!!	Thanks again for the order and the pleasant cooperation!	Another Great Experience ♥	It was great experience working for this customer	Outstanding experience!	Straightforward order. Pleasant experience . Highly recommend!	Great buyer!	Thank you.	Great as always!

Appendix 9 Average ratings gig workers and customers

Gig worker		Customer	
Gig worker	Rating (given to gig worker)	Customer	Rating (given to customer)
Gig worker 1	4,3	Customer 1	5
Gig worker 1	4	Customer 2	5
Gig worker 2	4	Customer 3	5
Gig worker 2	4	Customer 4	5
Gig worker 3	4	Customer 5	5
Gig worker 3	4	Customer 5	5
Gig worker 3	4,3	Customer 6	5
Gig worker 4	3,3	Customer 7	5
Gig worker 4	2	Customer 8	1
Gig worker 4	3,7	Customer 9	4
Gig worker 5	1	Customer 10	5
Gig worker 6	4	Customer 11	5
Gig worker 6	4,3	Customer 12	5
Gig worker 6	4	Customer 13	5
Gig worker 7	4,3	Customer 14	5
Gig worker 8	3	Customer 15	5
Gig worker 9	3,7	Customer 16	5
Gig worker 9	4,3	Customer 17	5
Gig worker 10	4	Customer 18	5
Gig worker 10	4	Customer 19	5
Gig worker 10	4	Customer 20	5
Gig worker 11	4,3	Customer 21	5
Gig worker 11	4	Customer 22	5

Appendix 10 Coding structure

Code	Grounded	Code groups
Consequences ratings on gig worker profile	36	Knowledge of the rating systems
Behaviour for high ratings	31	Strategies for positive ratings
Handling emotions	22	Well-being of the gig worker
Judgments about rating systems	21	Knowledge of rating systems
Reasons that affect private life	18	Well-being of gig workers
Pleased to receive positive rating	17	Feelings on ratings
Set boundaries	16	Strategies for positive ratings
Rating systems not transparent	15	Knowledge of rating system
Feedback at the end of the order adds little	14	Feedback/expectations
Negative emotions over low rating	14	Feelings on ratings
Ratings starts with customer	14	Knowledge of rating systems
Work and experience is fun	13	Feelings on ratings
Vacation mode	13	Operation platform (not rating systems)
Customers give targeted feedback	12	Feedback/expectations
Reasons for working at digital labour platform	11	Background, knowledge
Follow-up in case of negative assessment	11	Strategies for positive ratings
Positive rating gave self-confidence	10	Feelings on ratings
Personal development	10	Strategies for positive ratings
No emotions at (low) rating	9	Feelings on ratings
Customer contact by other means	9	Dealing with platform restrictions
Secondary source of income	9	Reason for gig work
Pre-work before gig starts	9	Strategies for positive ratings
Skills learned and further developed	8	Background, knowledge
Look for improvements	8	Feedback/expectations
Unwritten rules assessment system	8	Knowledge of rating systems
Service fee too high	8	Dealing with platform restrictions
Lookup information	8	Operation platform (not rating systems)
Indifferent after some experience on platform	7	Feelings on ratings
Adapting behaviour to customer	7	Strategies for positive ratings
Additional work for little money or for free	7	Strategies for positive ratings
Findability/level factors	7	Operation platform (not rating systems)
Work experience alongside digital labour platform	6	Background, knowledge
Sense of achievement	6	Feelings on ratings
Satisfied with platform/rating	6	Feelings on ratings
Actions after ratings	6	Knowledge of rating systems
Strategy for (improved) well-being	6	Strategies for positive ratings
Present knowledge of the rating systems	5	Knowledge of rating systems
Gig worker ratings behaviour	5	Knowledge of rating systems
Customer relations	5	Strategies for positive ratings
Opinion about platform	5	Operation platform (not rating systems)
Reasons for using platform	5	Operation platform (not rating systems)
Ratings often positive	4	Feedback/expectations
Let (negative) feelings go after receiving (low) rating	4	Feelings on ratings

Hunch about rating	4	Feelings on ratings
Started with low prices	4	Strategies for positive ratings
Adapting services (gig)	4	Strategies for positive ratings
Risks of gig work	4	Strategies for positive ratings
More confidence with good customer communication	3	Feelings on ratings
Summary feedback on ratings	3	Knowledge of rating systems
Consequences of other causes on gig worker profile	3	Knowledge of rating systems
Other payment methods	3	Dealing with platform restrictions
Primary source of income	3	Reason for gig work
Coordination with customer	3	Strategies for positive ratings
Anything for five stars	3	Strategies for positive ratings
Forced additional work	3	Well-being of gig workers
Well-being priorities	3	Well-being of gig workers
Selectively taking gigs	3	Well-being of gig workers
Ensure calmness	3	Well-being of gig workers
Pre-training and retraining	2	Background, knowledge
No response even if you comply with assignment	2	Feedback/expectations
Customer contact deviates from review	2	Feedback/expectations
Getting a rating is nice	2	Feelings on ratings
Getting rating/feedback is nice	2	Feelings on ratings
Stress at low rating	2	Feelings on ratings
Beginner's behaviour	2	Strategies for positive ratings
Gig worker risks	2	Strategies for positive ratings
Unreasonable customer behaviour	2	Strategies for positive ratings
Avoid negative ratings	2	Strategies for positive ratings
Work for little money or for free	2	Strategies for positive ratings
Concentrate	2	Well-being of gig workers
Benefits gig work	2	Well-being of gig workers
Wrongful acts customer	2	Operation platform (not rating systems)
Contact with customer is more valuable than review	1	Feedback/expectations
Satisfied with the platform	1	Feelings on ratings
Learn from experience	1	Strategies for positive ratings
Rest	1	Strategies for positive ratings
No customer loyalty	1	Well-being of gig workers
Negative emotions	1	Well-being of gig workers
Rating system impact on wellbeing	1	Well-being of gig workers
Successful completion	1	Well-being of gig workers
Give up free time	1	Well-being of gig workers
Payment mechanism	1	Operation platform (not rating systems)
Consequences of actions	1	Operation platform (not rating systems)
Gig worker level	1	Operation platform (not rating systems)
Ignorance/not transparent	1	Operation platform (not rating systems)