STS Research Paper

The Rise of the Digital Labor Market

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INTRODUCTION

As of 2018, an astounding 15 million Americans consider themselves to be self-employed, and another 24 million claim to be interested in making this jump (FreshBooks, 2019). In hopes of taking control of their schedule, reducing their stress levels, and pursuing major lifestyle changes, these rogue, boss-less individuals have seemed to break free from the system. Self-employment offers a plethora of benefits to those participating, but its low barrier to entry is what makes it so equitable for people of all backgrounds. It's also evident that technology has expedited the development of the self-employed by creating new opportunities for the self-employed to connect with customers. In response to this overwhelming shift, my report will explore a branch of self-employment: the digital labor market, a term used to describe a subset of the gig economy where workers use ICT (internet communications technology) to buy and sell their labor. Notable examples of this practice include services like Uber, TaskRabbit, and Upwork. Primarily, this report explores the ethics of the digital labor market in a range of areas and assesses feasible solutions to the seemingly inevitable problems that have arisen in the global digital labor market.

LITERATURE REVIEW AND BACKGROUND

The Digital Labor Market at a Glance

In the infancy of business process outsourcing (BPO), there were only a handful of locations that could offer a sufficient amount of connectivity to support transnational workflows, but as ever more people in low-income countries connect to the Internet, another fundamentally different type of outsourcing has emerged: digital lab or platforms in which clients post jobs and workers bid on them (UNCTAD, 2009). This practice created a spacial unfixing which has

completely altered the idea of a worker having a place-based job (Hudson, 2001). In theory, the digital labor market magnifies workers' opportunities and fills the gap between employers needing employees and workers who are willing and able to work. For the employers, work is turned into a commodity in which workers are transformed into a computation service (Irani, 2015). Once this system was in place, it was soon realized that tasks such as translations, transcriptions, lead generation, marketing, and personal assistance could then all, in theory, be completed by workers from anywhere for clients based anywhere (Herod, 2001). However, in the eyes of the government, third-sector organizations, and private sector actors, digital labor offers job creation for some of the world's poorest by taking advantage of connectivity and the willingness of an increasing number of firms to outsource business processes (Graham et al., 2017).

Digital Labor Markets in Practice

The three most popular and most active digital freelancing websites worldwide are Fiverr, Freelancer, and Upwork. Together, they cover millions of clients, workers, and projects as they outsource work all across the globe.

Fiverr, who lists over 3 million services on their website, deploys an online platform where freelancers post the type of work they offer with different packages; the more expensive the package, the more work they offer. A customer browsing the website for a logo design, for example, gets to scan over freelancers in this field of work, view examples of each vendor's past work, and ultimately find someone who fits their criteria. After selecting the freelancer they'd like to work with, they can choose among 2-3 packages. In this scenario the cheap package may be around $15 and provide 2 basic logos, 2 follow-up revisions of the work, and 3 day delivery. The highest quality package might range up to $125 but would include 5 logos, unlimited follow-

up revisions, and 2 day delivery. With this structure in place, prospective employees can offer their services on an internet marketplace of sorts. The two following websites work in similar manners.

Freelancer, another extremely active company in the digital labor sphere, works slightly differently. Whereas Fiverr's platform is focused on the sellers of labor, Freelancer's market place is focused on specific job postings by employers. Employers list specifically tailored jobs or tasks while workers bid on them, which, in theory, allows employers to have the freedom to choose the best. Freelancer currently has 21 million users across the world.

With over 12 million freelancers registered and over 5 million active clients, Upwork is the world's largest digital freelancing platform. This billion dollar company uses their platform as a means of listing and selling labor in the most efficient way possible. This platform prides itself on its matching algorithm between employers and workers, a modified interactive system in comparison to Freelancer or Fiverr. In any case, the mechanism is the same; employees and employers are connected through ICT in a marketplace where labor is being valued and traded as a commodity on an extremely expansive scale, only made possible with the connection over the web.

Uber and Lyft are also some of the largest players in the digital labor economy. These ride-sharing platforms allow drivers to monetize their car by driving passengers who request rides through an app-based interface. On paper, Uber and Lyft offer a fantastic work-life balance. They boast flexible hours, easy payment, and the idea of a planned, balanced work day (Uber, 2020). The barrier to become a driver is relatively low. In order to sign up for Uber, potential drivers must 1) pass a background check and a review of his or her driving record; 2) submit documentation of insurance, registration, and a valid driver's license; 3) successfully complete a

city-knowledge test; and 4) drive a car that meets a quality inspection and is less than a certain number of years old (Uber, 2020). After drivers qualify to work for Uber, they are free to work for as much or as little time as they would like. Unlike the freelancing platforms below, these platforms don't give workers a voice in the pricing process of their work. Rather, the prices fluctuate based on time and place, a detail that dictates the lifestyle of a driver drastically.

Claimed Advantages and Benefits

The following data points are derived from two surveys conducted by the Benenson Strategy Group. One of which is a survey conducted in December 2014 of 602 driver-partners (Uber's label for drivers) and another survey conducted in November 2015 of 632 driver-partners. As mentioned earlier, there is no minimum that Uber's driver-partners must drive to continue to be employed by Uber. With that in mind, these surveys aimed to only analyze behaviors of active drivers. For these purposes, they classified an "active driver" as someone who provided at least 4 trips to passengers in a given month. These surveys both reveal many of the motivations behind those that went into Uber and provide context on what demographics work for Uber. More importantly, these statistics exemplify the claimed benefits by Uber that have successfully converted people into Uber driver-partners. One of these demographics pertained to past and current employment status. Across the surveys, only 8% of Uber's drive-partners were unemployed before pursuing Uber, indicating that the vast majority of drive partners were either adding work for themselves or switching jobs altogether. Following up on this statistic, the surveys give clarity on the Uber drivers' current employment status. In analyzing the current employment status of Uber drive partners, it was found that, as of 2015, 38% of driver partners had no other job than Uber, 30% also had a part time job, and 31% had a full time job (Hall, 2016). Thus, the surveys highlight that the majority of Uber driver-partners

were driving Uber alongside another job. Additionally, the surveys highlight the most common reasons for getting into driving for Uber. The most common reasons (combining major and minor reasons) were "to earn more income to better support myself or my family" (91%); "to be my own boss and set my own schedule" (87%); "to have more flexibility in my schedule and balance my work with my life and family" (85%); and "to help maintain a steady income because other sources of income are unstable/unpredictable" (74%).

Many of Uber's advertised claims also align with those from freelancing companies like Fiverr, Freelancer, and Upwork. In particular, there are four claimed benefits from working in a digital labor landscape like one of the aforementioned companies. First, these digital freelancing platforms offer the obvious benefit of remote work. Workers can connect with employers who are situated in any location, giving them the ability to work wherever is most favorable for them. In addition to remote employment, companies also claim that this employer-employee network offers gig workers a diverse span of employers where workers have the ability to get highest possible payment for a certain task/gig, therefore ensuring the workers in getting the biggest return on their investment of time and effort. By tapping into an expansive network of employers, these platforms allegedly allow workers to get the best price for their labor. These platforms also boast flexible hours for their laborers in place of a 9-5 job. Motivated by the output of their work rather than specific location-based attendance, they work on their own schedule. Lastly, digital freelancing platforms advertise this idea of siloed work. Freelancers can state explicitly what they are willing to work on, which supposedly allows them to focus on specific tasks rather than housing an array of responsibilities, some of which may be more unfavorable than others. The following pieces of this report analyze how these claimed, theoretical benefits differ from reality using the framework outlined in the following section.

FRAMEWORK

In *Journal of Developmental Entrepreneurship,* the author attempts to study the gig economy through auto-ethnography and details a particular means of evaluating his exploration in doing so. The framework used relies upon the following key variables in order to define micro-entrepreneurial challenges: formulating and executing strategy, constructing a value web, utilizing mentors, and negotiating ambiguity in business (Eveland & Maclennan, 2019). Although this report does not contain cases of auto-ethnography in its research, the *Journal of Developmental Entrepreneurship* does provide this evaluative framework applicable to the following research into the gig-economy and towards ethnographic findings of active, key players within the digital labor market.

METHOD/DATA COLLECTION

Issues within the Digital Labor Market

Five main issues come about in an analysis of the digital labor market: 1) bargaining power 2) intermediated value 3) skill development 4) flexibility and 5) economic exclusion. Many of these issues directly rebut the advertised ideals that are boasted by the very companies which propagate these barriers.

By enabling remote work, digital work platforms were designed to minimize the outside regulation of the relationship between employer and employee. Although remote work offers the freedom of location between employer and employee, the massive network it creates also pins freelancers against one another. These competitive dynamics (in which there is more demand for work than supply of it) result in a situation in which low-cost, low-capability suppliers of work

could be disadvantaged and become clear price-takers with little bargaining power (Kaplinsky, 2004). Another layer to this problem is the geographical distribution of those who are buying and selling labor. Buyers tend to come from the wealthiest countries, whereas sellers overwhelmingly come from low-income countries, specifically India and Philippines (Graham et al., 2017). Upon further analysis, it's also evident that the hourly rate of labor for freelancers active on these types of platforms tends to be much lower in low-income countries and is much higher in high-income countries. Thus, despite visions that global labor platforms render the location of workers irrelevant, it seems to be precisely the differences between places that encourage corresponding differences in wages. Even with these unsettling statistics, there are stories of success. Arvin, a freelance worker who used to work a corporate job, found that digital freelancing opened him up to doing what he loved (Graham et al., 2017). Now, he performs Search Engine Optimization (SEO) for remote clients and gets to work on his own time. He used "skill arbitrage" (the act of selling one's labor to whomever is willing to pay the most) to optimize both the financial gain and the fulfillment he received from working. On the other hand, Kim-ly, another digital freelancer, felt pressure from the digital labor market landscape. Her experience was like that of many others in this field. With thousands of other cheaper options at their disposal, companies weren't hiring her at her desired wage. Then, due to an abundance of cheap labor, she was forced to settle for a lower wage, a tactic which helped gain clients in the short term. However, as competition for work continued, she was put out of work as cheaper labor was always found elsewhere. In this situation, "labor arbitrage" forced Kim-ly out of work. Unlike Arvin's case, Kim-ly's story exemplifies the lack of bargaining power that exists in the digital labor marketplace. This lack of bargaining power describes the struggle for freelancers to create a consistent, predictable business model, an issue which clearly exemplifies their challenge to

formulate/execute strategy as outlined in Eveland & MacLennan's micro-entrepreneurial, evaluative framework.

Current digital labor market platforms are built on a business model that take a portion of the price of the labor that is found through the platform. Upon their own research, Coe and Yeung have found that value capture, the process of retaining value some percentage of the value in every transaction, is the most important imperative for actors in production chains. However, in these digital labor models, a significant part of the value of trade in terms of earnings is captured not by producers themselves, but by intermediaries who use geographic location, networks, and other positional advantages to mediate between buyers and sellers, potentially contributing to, as well as reinforcing, global inequalities (Pietrobelli and Saliola, 2008). This intermediation drastically inhibits the fair pay of the workers, and undermines the value of their labor.

Additionally, a worker's ability to develop and upgrade their skills is impeded by online freelancing platforms. Many freelancers on these platforms describe that a number of their employers give them little to no context as to what they are working on, marginalizing their exposure to the larger business picture or their ability to develop new skills in other areas. In analyzing many interviews with those in this business, Graham argues that there is a common practice of clients withholding contextual information about their business and/or the tasks they outsource through digital labor platforms. As an entrepreneur attempts to create a value web (as described by Eveland & MacLellan's framework), the practice of intermediated value and inhibited skill development negatively affects their ability to create value in two of the most important aspects of entrepreneurship: financial control and business development.

The digital labor market also reflects another challenge emphasized by Eveland & MacLellan's framework: the ambiguity of negotiation in business. Specifically, this aspect is seen in the misrepresentation of many digital labor platform's public portrayal of work flexibility. As it relates to ride-sharing platforms, many drivers are consistently unsure of their schedule. Although, they can always choose when to work and when not to work, many of the technological mechanisms of the app-based platforms cause drivers to work unreasonable hours. The harsh reality is far from what's advertised online. Olive, a driver for Lyft, says, "I put in like 40 [hours/week] or even more depending on the magnitude of work… That's just at night… I work [locally] during the day, so when I go back home I put in five to six hours… then over the weekend… In total it will be like 70… You work 24/7." (Wood, 2019). Of my own personal interviews with drivers, I've also stumbled upon stories of ungodly hours. Kevin, an Uber driver in the Charlottesville area, noted that surge pricing and motivational extra-earning rewards periods (specifically two that took place from 10pm-12am and 12am-2am) caused him to work an 18 hour day, an unplanned and unanticipated situation. He explained that he started his day when people needed rides to work, roughly 8am, and worked throughout the day until surge pricing was back for people getting off work, around 5pm. The mid-day range didn't serve him much purpose as the rates were much lower during this period. So as he filled out the last of his evening shift, he saw an advertisement for an extra earning period that started at 10pm. For every ride he completed between 10pm-12am, he received roughly 20% more per ride. As he began driving during this period, another promotion was advertised to him: a higher extra earning percentage that took place from 12am-2am. Without any initial intent of doing an 18 hour day, he found that he'd worked from 8am-2am. In legal terms, these drivers have been classified as independent contractors when in reality their work resembles that of an employee (Graham et al.,

2017). This prompts a legal issue of worker classification – if their work resembles that of a salaried employee, why should they get the same treatment as an independent contractor? The digital labor market's natural mechanisms seem to benefit clients more effectively than workers.

Economic Exclusion

Many workers view the digital marketplace as the perfect place to break through racial barriers. In a local setting without a digital labor market, workers are forced to confront societal discrimination through practices like in-person interviews which reveal things such as race and gender. In theory, digital labor platforms are facilitate anonymity that can circumvent this barrier. However, many times this anonymity causes employers to be even more blatant about their discriminatory practices. One example notes a job posting that explicitly directed South Asians not to apply (Graham et al., 2017). These types of instances force laborers to not just mask their identity but often lie about who they are, in hopes of having a better chance at landing a job. Many workers note that this practice leads to an extremely uncomfortable working relationship their employer.

Proposed Solutions

In spite of the challenges within the digital labor market, there have been few proposals to repair the system. First, there have been proposals of a market based strategy. In this scenario, an international organization might be set up to hold businesses accountable for outsourcing methods that are unethical. The idea behind this approach is that ICT has be used to facilitate a more transparent geographic flow of goods and services as they move across the world, but in no sense does that same transparency exist for digital labor. Second, there is a proposal for a labor rights approach. In the past, workers have been able to come together, form unions, and strike against companies. This type of action is essentially impossible when digital workers are spread

across continents and unaware of who their fellow digital workers are. That being said, actions can be taken to emulate this type of approach. The proposal outlines the forming of a transnational digital workers union and the creation of social media groups where workers can coordinate, share complaints, and give feedback about certain unethical employers. The third strategy is that of a regulatory approach. The digital worker sphere, in nature, makes it difficult to come together to lobby politicians. However, given that only a handful of countries make up the majority of the digital labor markets, perhaps these places could attempt a regulatory approach due to their network centrality.

DISCUSSION / CONCLUSION

Although the digital labor market has provided workers with an unprecedented network of employers, it goes without saying that there are visible problems that negatively impact the digital workers. Notably, these issues are bargaining power, economic exclusion, intermediated value, skill development and flexibility. This is not to say that the digital labor market is at fault for simply existing. Rather, this report aims to recognize but more importantly provide a response to these issues in order to further develop the digital labor market.

As much as the proposed solutions have validity in their intent and practicality, I think those will only damper the negative effects that these digital labor market platforms are having on its workers. The scope of the digital market is much too difficult to control from a policy standpoint. I think the correct approach is by targeting the major platforms themselves. Although ambitious, there are only two options which would truly flip the script of the digital labor market: 1) change from within – modify the business model and the structural technological set up of the platforms or 2) create a platform which accomplishes the same task, a platform which

is cognizant of these issues and actively fighting to combat them. This report and its underlying analysis make it clear that the platforms themselves dictate the harmful behaviors that have developed. A couple examples of how the platforms can do better: 1) stop taking profit from transactions (monetize in other ways, they have millions of users) or use the platform as a linkage between workers that then enables them to communicate by other means 2) limit discriminatory speech (only relevant to job postings) 3) provide training services/seminars/ videos to bolster workers' skills and 4) offer a service to connect workers.

The issues around the digital labor market are not innate. They are propagated in the way in which these platforms are built. Therefore, changing the structure of the platforms themselves is a potential solution. It may not be using the recommendations mentioned above, but if the industry is to change, it must come from the industry leaders.

FUTURE WORK

As technology continues to grow, adapt, and humans grow with it, the idea of digital labor markets will continue to expand. Thus, the issues mentioned earlier will only be ever more present and relevant. As far as future work goes, I think more surveys should be conducted to stay in touch with the workers and continue to refine their needs. Additionally, the proposed solutions that target the governmental sphere should be looked into more carefully and thoughtfully. If there is potential for workers to come together, many monumental changes could occur. If I were to explore future fields related to this, I would reach out to these companies to get more insight on their practices from an inside perspective.

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