The Role of Digital Work Platforms in Negotiating New Power Dynamics: Experiences from a Social Digital Skills Platform in South Africa

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ABSTRACT

Digital work platforms can serve as trust-mediating agents between workers and employers who are previously unknown to each other. The design decisions made by digital work platform developers have an impact on the power dynamics between workers and employers. We report on our experience with piloting a social digital platform, VASTBlu, designed to enable workers from township communities in South Africa to access work opportunities in the mainstream economy. We also discuss ways in which factors like symmetry of review or the frequency of review between parties could be consciously chosen to change the power dynamics between parties in a digital work platform, reducing unfair practices and bringing increased power and dignity to workers.

CCS CONCEPTS

• Human-centered computing~Ethnographic studies • Social and professional topics~Computing/technology policy

KEYWORDS

Digital platforms; South Africa; power dynamics; design choices

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1 Overview

Digital work platforms, like Uber, Lyft, Grab, GoJek, Care.com and many others, connect workers to individuals desiring their services and form a key component of the larger sharing economy [7,8]. The impact of these platforms on workers around the world is increasingly studied [2,4,7,9]. Hsiao et al. focused on the way in which the benefits of the sharing economy are uneven in society and may be limited to certain populations [4]. Qadri examined how the relationships of workers to each other and these digital work platforms is different in the Global South [2] .Rosenblat focused specifically on Uber [9] and Ticona et al. examined how tech shapes labor across domestic work and ridehailing [12]. Winner explored the politics of technical artifacts more broadly than digital work platforms [14]. Ekbia and Nardi explored the connection between HCI and social inequality [3]. Dombrowski et al investigated socio-technical means to mitigate wage theft [1].

In this work, we have two primary goals. First, we describe our experience with VASTBlu, a digital work platform, which was piloted in three township communities in Johannesburg, South Africa. Second, we go beyond the VASTBlu prototype to explore the potential for design choices made by digital work platforms to consciously impact the power dynamics between workers and employers. We use this context to explore how platform design choices can actively used to change power dynamics, reducing unfair practices in work activities and bringing increased power and dignity to workers.

2 VASTBlu

South Africa has one of the widest gaps between rich and poor. According to World Bank's Poverty and Shared Prosperity report [10], South Africa has the second highest Gini coefficient, a measure of income inequality, after only Lesotho, a small country completely surrounded by South Africa itself. There is also high unemployment (close to 30%). Approximately 80% of the population in South Africa lives in economically marginalized communities. There are over 350 township communities that are literally across the road from wealthy communities/economic hubs and yet workers who live there are frequently unable to "cross the road" and access the nearby economic opportunities. Many township residents are unbanked, but almost all (97%) of the townships residents have access to a cell phone. VASTBlu

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was specifically designed to address the barriers individuals living in these communities experience in accessing work opportunities in close-by economic centers.

VASTBlu is a digital platform that enables workers to create a skills passport or digital portfolio of work they have done. The platform itself is an intermediary or mediating agent that allows participants who don't know each other to bootstrap their trust in a shared platform to establish sufficient commercial trust in each other to transact. It allows workers in economically-marginalized communities to access work opportunities in the mainstream economy. For customers/employers, it is an alternative marketplace to find skilled, profiled and socially-verified resources in their vicinity.

The first phase in the design of VASTBlu was a series of focus group interviews conducted in the communities of Diesploot, Alexandra and Tembisa between January and March 2018. We held 9 focus group interviews of 15-20 people each (3 focus groups in each community). We asked the focus group participants to talk about the barriers they face in accessing work opportunities in nearby communities. We identified 12 commonly mentioned barriers and for each one, we specifically asked how a technology platform like VASTBlu could be designed to mitigate that barrier[1]. For example, one barrier raised was distrust by potential employers because of the high crime rate attributed to members of low-income communities. The mitigation in VASTBlu is that new trust relationships are created on the technology platform based on job history and past reviews.

The second phase was a series of enrollment events between July and December 2018 in the same communities. We enrolled approximately 1000 workers (~300 from each Diesploot, Alexandra and Tembisa). Common professions reported by workers at these events included plumbing, painting, housekeeping, pool pump repairs, electrical repairs, gardening, car repair, gate motor repairs, child-minders and many others. Women were roughly 12% of the workers enrolled and most often reported skills and experience as domestic workers.

2 Digital Work Platform Design Choices

We also identified a set of 6 design decisions that most platforms in the digital sharing economy must make: 1) symmetry of review, 2) type of reviews/validation of reviews, 3) the timing of reviews, 4) enrollment requirements, 5) support for overcoming language and cultural barriers in complex negotiations, and 6) policies/standards for removing participants from the platform. Far from simple implementation choices made by developers, these decisions impact the power dynamics between participants in the platform.

We do not have the space here to expand on each of these 6 design decisions here[1]. However, as a specific example, domestic workers may often work for the same employer for a longer period of time (e.g. providing childcare or cleaning services). An employer could try to withhold a good recommendation to gain additional and inappropriate leverage over the worker. In such a situation, a platform decision to enable or even require periodic review (e.g. monthly or quarterly) could have a dramatic impact on the ability of workers to accumulate good reviews over a period of time, making them less vulnerable to exploitation at the end of their employment. Platform designers decide what opportunities there are to dispute poor reviews or provide alternate evidence. Similarly, platform designers decide how reviewers are validated (e.g. can anyone write a review for a worker or employer at any time? Or can only participants who have had a validated interaction with another participant review them?). These design decisions can impact the degree to which reviews in the platform are susceptible to manipulation by competitors or to deliberate misinformation from malicious parties.

Workers are often socially and economically disadvantaged in negotiation. Platforms can play an active role in shifting power dynamics to reduce inequality and thus help to mitigate barriers and level the playing field in society as a whole.

[1] We elaborate on the 12 common barriers identified in focus groups, mitigations, and the 6 designs decision in a techreport available at https://people.clarkson.edu/~jmatthew/publications/KamangaMatthews_COMPASS20expanded.pdf.

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