

Title: Digitalization and Dignity: Digital driving in Kenya

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Abstract

As digitally-mediated work grows worldwide, development scholars and practitioners are raising questions about the quality of these new forms of work. This article explores the subjective dignity experiences of digital drivers in Kenya drawing on both a survey and in-depth qualitative interviews. In spite of material indignities, a majority of drivers in 2019 considered their work dignified, particularly relative to counterfactual work opportunities in their highly informal context. This article demonstrates the ways that digitalization itself has been central to shaping a more dignified subjective work experience. Digitalization imposes dignifying rules and order, breaks down socioeconomic barriers through digital matchmaking, and to some extent democratizes opportunities for social mobility. However, dignity gains from digitalization can be undermined by failures of app companies to maintain sufficient rule enforcement and to ensure material dignity through adequate pay. In contexts of existing high informality, platform work can feel for workers like a step towards dignifying formality rather than a slide away from it.

Keywords: Digitalization, dignity, gig work, Kenya, ride hailing, Uber

1. Introduction

The emergence of gig work has ignited significant debate about what these digitally-mediated forms of work mean for job quality. Scholars have raised concerns about low pay and long hours (Fielbaum & Tirachini, 2021; Wood et al., 2019), extensive algorithmic control (Rosenblat & Stark, 2016), suppression of worker voice (Chen, 2018; Iazzolino, 2021), and, especially in development contexts, misleading rhetoric about entrepreneurship and economic inclusion (Meagher, 2021; Nastiti, 2017). At the same time, workers, especially in the Global

South, often report high levels of job satisfaction (ILO, 2021a), leading to an oversupply of workers and frequent articulation of liberatory rhetoric about platform work (Pollio, 2019; Wood et al., 2019). Thus, these new forms of work raise a familiar paradox, in which workers find meaning and satisfaction in what appear objectively or materially to be ‘bad’ jobs (Deery et al., 2019; Laaser & Karlsson, 2022).

Taking workers’ subjective experiences seriously can deepen our understanding of the ways workplace arrangements and workers’ own actions produce positive experiences and challenge our objective conceptions of good and decent work (ILO, 2013; Khan et al., 2023; Laaser & Karlsson, 2022). Exploring workers’ experiences of dignity allows us to observe how new models of work affect workers’ sense of human and social value (Deery et al., 2019; Laaser & Karlsson, 2022). In the context of digitally-mediated work, social meanings of work are tied not just to worker interactions with the platform ‘employer,’ but also come through relationships with app users (Khan et al., 2023) and society at large (Monteith & Giesbert, 2017).

This article draws on a survey of 450 digital drivers in Nairobi and 38 qualitative interviews in Nairobi and Mombasa. While only a small share of digital drivers in the survey earned above the minimum hourly wage, 78% reported that their work was ‘dignified.’ This subjective, positive dignity experience appeared to be largely a function of the ways that digitalization interacted with the local context and was interpreted vis a vis alternative forms of work. The same digital tools that made drivers legible to app companies also made them legible to high-status riders, shifting how drivers perceived their social belonging. Digitalization brought a sense of order, professionalism, and respect that was often lacking in other forms of work in Kenya’s vast informal sector. The relative consistency of clients obtained through digital

matchmaking provided a valuable regularity of income uncommon in the labor market and helped some drivers acquire vehicles and the status attached to owning such an asset.

However, drivers' experiences of dignity were contingent upon managements' decisions to enforce rules (at some cost to themselves) and the prices app companies set, which were pushed down over time. When prices fell, drivers felt pressure to subvert the very rules that enabled subjective dignity gains. Some drivers' hopes for upward mobility dampened.

This article highlights the ways that digital tools facilitate interactions in the real, social world, resulting in new relationships of exchange, inclusion, and status. For workers already subject to the undignified realities of patchwork livelihoods in a context of high informality and inequality, digitalization of work has the potential to introduce some regularity, ordering, and professionalism that can offer workers a subjective experience of enhanced dignity in comparison to counterfactual opportunities. But that potentiality is contingent on material conditions. It appears that only where digital rules are fair and enforced, only where pay is adequate, can dignity gains be secured and maintained.

2. Dignity and digitally-mediated work

Dignity—with its both material and subjective dimensions—offers a helpful conceptual entry point for exploring the contradictions between objective work features and drivers' interpretations of their experiences. Hodson (2001) defined dignity as 'the ability to establish a sense of self-worth and self-respect and to appreciate the respect of others' (3). Hodson and others recognized that this kind of dignity includes both material (pay) and subjective dimensions. Sayer (2007), for example, argued that 'income can be a surrogate for respect' (576) because of what it signals about power. Hodson saw material and subjective dignity as related, but also acknowledged that they may not always move in tandem. It is something made possible

by organizational structures, but also enacted by workers both individually and collectively in the cultures they craft together (Hodson, 2001; Laaser, 2022).

Historically, scholars interested in the relational dimensions of dignity focused mainly on worker-employer relationships and worker-worker relationships, paying attention to disrespectful interactions with management, workplace harassment, and bullying (Sayer, 2007). Much research on app-based digital work also has focused on app companies, assessing the fairness of conditions set by the companies for workers (Anwar & Graham, 2020; Rosenblat & Stark, 2016; Wood et al., 2019). However, in service work, including app-mediated gig work, workers' experiences are also shaped by their interactions with customers. For example, Khan *et al.* (2023) noted the importance of these offline interactions in shaping the experiences of domestic care workers sourcing work through digital platforms in Australia.

The conceptual space of dignity offers a rich lens through which to explore the apparent contradiction between the objective and subjective dimensions of work quality in the face of jobs that can appear 'bad' or even exploitative. Ride hailing, or 'digital driving' as it is known among its workers in Kenya, is one of those kinds of jobs. While some institutions like the World Bank have lauded digital driving's potential to create jobs in the Global South (World Bank, 2019), many have documented concerns about poor job quality. Drivers put in long hours for low pay (Berger et al., 2019; ILO, 2021a; Pollio, 2019). Ride hailing firms use algorithmic controls to manage and influence workers; algorithms set prices, enforce rules, lure drivers to specific geographies, and even resolve disputes (Rosenblat & Stark, 2016). Platforms expect workers themselves to bear physical and economic risk tied to operations (MacMillan, 2022; Rogers, 2015).

However, drivers often express high levels of job satisfaction. Studying digital drivers in London, Berger et al. (2019) found high levels of subjective well-being among drivers in comparison to other employed and self-employed Londoners, which they attribute to drivers' preferences for autonomy and flexibility in scheduling. In a multi-country survey of digital drivers, ILO (2021a) found app-based drivers had higher levels of work satisfaction than traditional taxi drivers, hypothesizing that this was due to the absence of good alternative income earning opportunities in Global South economies. The ILO argued that satisfaction was derived from 'intrinsic' characteristics such as flexibility rather than 'extrinsic' ones such as pay, citing that Kenyan drivers were highly satisfied in spite of local protests over pay (though they do not report on participation levels in those protests).

Some scholars have been dismissive of digital drivers' positive subjective experiences, casting driver accounts of their work as fun, dignified, flexible, or autonomous as 'illusions' (Umer, 2021) or 'mythic' (Malin & Chandler, 2017) sentiments shaped by app company rhetoric. Anwar et al (2023) wrote that ride hailing 'is the latest manifestation of neoliberal globalization...under the garb of "freedom and flexibility."'

Sociologists of work have developed a number of hypotheses around this paradox of high subjective well-being— —in objectively 'bad' jobs outside the digital space. They show how important it is to position workers' experiences in the context of counterfactual opportunities, to notice the narratives that workers craft collectively to claim their own dignity, and to recognize that workers are not homogeneous, facing differing opportunity landscapes and preferences.

A number of studies show the ways that structural realities of a context can shape the ways workers view what might be considered by outsiders as 'bad' work (Holtum *et al.*, 2022). Certain attributes of that bad or even objectively undignified work may look more attractive in

contexts where counterfactual opportunities are also unattractive. For example, Millar (2008) showed that Brazilian waste pickers felt their work offered relative freedom from the ‘degradation of overseers’ in formal jobs, where bosses ‘ordered them around,’ ‘humiliated them,’ and so tightly controlled their schedules that they could not pursue further education nor take a day off when sick (27). Hannah Dawson (2022) documented the ways young men in urban South Africa often rejected low-wage jobs, even when they really needed the money. In their context, accepting such jobs served to reinforce their lack of career progress, racial inequalities, and social demands that came along with earning a formal wage.

Along these lines, Andrea Pollio (2019) recognized digital drivers’ embrace of ride hailing firms’ narrative of developmental entrepreneurship. Pollio does not view this as a passive reception of a message sent top-down from firms like Uber to drivers. Instead, he notes the way that such messaging found resonance with workers in the context of unfulfilled promises and persistent inequalities in post-apartheid South Africa. Some features of the work—like flexible scheduling—were experienced as meaningful liberation from the long, fixed hours associated with formal low-wage work, the realistic alternative work opportunity for many drivers there.

Others have pointed out that subjective experiences of work are shaped not just by context, but by the ways workers themselves make meaning out of their experiences. Studying those doing ‘dirty work’ in the UK and USA, Deery et al (2019) demonstrate how workers enacted dignity by reframing their understanding of their work, valorizing its difficult attributes, like the need for physical strength and endurance. Similarly, the *matatu* (minibus) workers Meghan Ference (2016) studied reframed their work as an opportunity to build confidence. They embraced labor organizing, attempting to professionalize the sector, which was also a means of resisting public perceptions of *matatu* workers as dirty, undisciplined, raucous, and corrupt.

Other research reminds us that there is not only no universal work ideal, but also no ‘universal worker’ (Acker, 1990) detached from race, gender, class, and other social attributes. Both Holtum et al (2022) and Berger et al (2019) examine the heterogeneous experiences of digital drivers in Australia and the United Kingdom, respectively demonstrating that satisfaction levels are closely tied to immigration status, which impacts a driver’s alternative work opportunities and reliance on the platform to earn a living. In New York City, 90% of digital drivers are immigrants, which likely has profound effects on how they interpret the quality of their work. We might also expect significant differences based on educational backgrounds, previous work experience, and whether a driver owns the car they are driving.

What has not yet featured in previous research is the ways that digitalization itself may be shaping gig workers’ experiences of dignity or indignity in their work. In this article, I use the lens of dignity to explore digital drivers’ experiences of dignity in their work in an emic way, attentive to these many possible explanations for why drivers might have high subjective experiences of dignity, even when pay, a material dimension of dignity, is low. Drivers in this study drew particular attention to the ways that digitalization shaped their offline interactions with customers, affecting the ways they were treated at work, how drivers saw themselves, and the ways that their communities and families judged their work. In the Kenyan context, marked by high informality and inequality, digitalization enhanced worker dignity by helping make drivers legible as professionals, enabling interactions across class divides, and making income regular in ways that enhanced upward mobility. We also saw that dignity experiences were not universal and were partly contingent on app governance and pay.

3. Methods

This article draws on a combination of quantitative and qualitative data gathered between 2019 and 2021. In late 2019, I led a six-week panel study recording 450 drivers' earnings and perceptions of the business. Enumerators recruited drivers by hailing short trips across Nairobi at randomized locations, days of the week, times of day, and app service providers. This was our attempt at approximating randomization in the absence of an official sampling frame, though it likely means that we underrepresent part-time and occasional drivers. Enumerators would invite drivers encountered on these short trips to participate in the survey. Consenting drivers participated in six weekly interviews focused on drivers' revenues (confirmed with app screenshots) and expenses. The final (sixth) interview included a 20–30-minute qualitative discussion about drivers' experiences, including questions about whether they found their work dignified and why, which we report on here.

Table 1: Summary statistics, 2019 Panel Survey

Variable	Final Sample (n=450)
Average Age	37
Average Years Driving	9.8
Average Years Digital Driving	2
Male	97%
Tertiary Education	46%
Digital Driving is main income	88%
Viewed Digital Driving as Opportunity for Growth	59%
Car via partner	51.3%
Car via loan	30.4%
Car owned outright	18.2%
Car engine <1300 CC	69%

Our survey asked, ‘Is digital driving dignified work?’ and ‘Why or why not?’ After reading through all of the open-ended responses, I developed a set of 16 codes¹ capturing the sentiments from responses on why drivers felt their work was dignified and five² for why some drivers felt the work was not dignified. These comments were brief, but provided a starting point to explore the topic in more detail in qualitative interviews.

I conducted qualitative interviews with 38 digital drivers in 2021. I selected a set of 30 drivers from the panel sample for these interviews, sampling purposively to capture a range of driver experiences based on survey variables likely to affect their earnings and subjective assessments of their work. These variables included the length of time on the platform and their car access arrangement, which was a major determinant of driver earnings. We also included a category of those who seemed from our records to have left the business. This group spanned across the other segments and allowed us to talk with a larger number of women, since many had dropped out by the height of the initial wave of COVID-19 in Kenya in July 2020. We found that many of these drivers had gone back to work in digital driving in 2021, sometimes on a part-time basis. (Eighty-eight percent of drivers in the 2019 survey considered digital driving their main source of income.) All drivers in the initial survey of 450 drivers were assigned a categorical group (Table 2), given a random number, and invited to participate in a qualitative interview in order of their random number. A summary of the Nairobi digital driver sample as per these parameters is in Table 2.

¹ Professional, legitimate, respected, earnings, class interaction, self-managed, low stress, popular, security, enjoyable, equal, flexible, backup income, work is vaguely ‘good’, pride, unclear explanation

² Disrespect, earnings, app companies, unprofessional, risks

Table 2: Qualitative sample in Nairobi, per sampling parameters

Group	Characteristics	Share of Survey Sample	Selected qualitative participants
Group 1	new-loan (Driving <3 years, paying a loan in 2019)	24%	5
Group 2	new-own (Driving <3 years, owned vehicle in 2019)	21%	5
Group 3	new-partner (Driving <3 years, had partner in 2019)	33%	5
Group 4	old-loan (Driving >3 years, paying a loan in 2019)	9%	1
Group 5	old-own (Driving >3 years, owned vehicle in 2019)	5%	2
Group 6	old-partner (Driving >3 years, had partner in 2019)	8%	4
Group 7	<i>Not driving July -- including women (who disproportionately stopped)</i>	31%	8
Total qualitative participants from initial survey in Nairobi			30

After learning about potentially interesting differences in digital driving in the Coast region ('Mombasa'), I interviewed an additional eight drivers there. Unable to sample from an existing list of drivers with known characteristics, I recruited drivers by hailing short trips from different parts of the area North Coast (2), Mombasa town (2), and South Coast (4). These drivers came from groups 1, 2, 4, 5, and 6 in Table. Table 3 shows the overall composition of the qualitative sample. In addition, throughout 2021, I also interviewed offline taxi drivers in Nairobi (6), representatives of driving platforms (2), and representatives of driver associations and transport worker unions (6) to widen my perspective.

Table 3: Overall qualitative sample.

	Nairobi (30)		Mombasa (8)	
<i>Vehicle Ownership Arrangement</i>				
Paying off a vehicle loan	7	23%	4	50%
Owned their own vehicle	11	37%	3	38%
Driving for a partner	12	40%	1	13%
<i>Duration Driving</i>				
Driving less than three years	21	70%	3	38%
Driving more than three years	9	30%	5	63%
<i>Gender</i>				
Male	24	80%	7	88%
Female	6	20%	1	13%
<i>Age</i>				
Average age	37		38	
<i>Education</i>				
Less than secondary	3	10%	0	0
Secondary completion	11	37%	3	38%
Tertiary	16	53%	5	63%

Because of COVID, I conducted many Nairobi-based interviews over the phone. A few months later, I interviewed the Mombasa drivers in person due to easing COVID risks. Interviews were largely conversational, following a semi-structured interview guide that covered work histories, experiences of digital driving, and perceptions on the quality of work starting at a high level (i.e. Is digital driving good work?) before moving into more specific probes around status, respect, fairness, application of skills, and future expectations.

Most interviews were conducted in English by me, though a small number of Nairobi drivers were interviewed by a trained research assistant in Kiswahili. Interviewers took detailed

notes in all interviews. Where recording was possible and permitted by participants, we recorded and transcribed the conversations. I did not observe substantive differences in interview quality in the phone versus in-person interviews. Perhaps this is because we had the chance to build trust with phone interviewees through repeated interactions in the 2019 panel survey and by sharing survey results with them over WhatsApp and YouTube.

I coded all notes and transcripts first in an open-ended way, then with more structure, using clusters of key concepts—professionalism, legitimacy, cross-class interaction—reflecting an emic view of dignity based on the quantitative survey and open-ended coding. From this process, it was clear how important digitalization was in shaping these experiences. In a final layer of coding, I looked specifically at the linkages between digitalization and drivers' subjective experiences around the dimensions of dignity they described.

4. Ride hailing in context

Ride hailing in Kenya operates differently than in the Global North, due to both the market context and app company adaptations. First, work in general is largely informal. The Kenya National Bureau of Statistics (2021) estimates that 83% of non-agricultural work is in the informal sector. About 49% of the non-agricultural workforce is self-employed (ILO, 2021b). Many workers participate in the 'hustle' economy, piecing together incomes from a collection of formal and informal work. Getting ahead hinges on creating one's own economic opportunities, largely by cultivating social connections with high-status individuals to shake loose possible future opportunities (Dawson, 2021; Thieme, 2021; Thieme et al., 2021). Many workers wish they could identify opportunities to work more. About 69% of male workers aged 25-60 reported that they would have liked to work more for pay in the seven days preceding the 2015/6 KIHBS

survey (Kenya National Bureau of Statistics - Ministry of Devolution & National Planning, 2018).

Second, usage of ride hailing services is mostly among a small, relatively affluent portion of the population. As of 2018, median monthly per capita consumption expenditure in Nairobi was about KES 11,381 (about \$113³), and taxi services, historically starting at KES 300, were understandably viewed as a luxury (Kenya National Bureau of Statistics - Ministry of Devolution & National Planning, 2018). Uber reported 528,859 active riders in the city as of January 1, 2020. That represents about 12% of the city's population. Another survey found that about 27% of the city's population had ever used a ride hailing service (Kantar, 2020).

Third, as in much of the Global South, car ownership is not widespread. As of 2012, only 15% of Nairobi households owned a car (Salon & Aligula, 2012). Low car ownership forced Uber and its competitors to accommodate drivers who did not own their own cars. When Uber first entered the market in 2015, they did so with only 100 cars, each belonging to a 'partner' (car owner) with at least five cars. Partners and drivers worked out their own payment arrangements. Soon, drivers could also join independently, but were required to front the significant cost of a car or take a loan. As of our 2019 survey, about half of drivers were working for partners, paying a fixed weekly rental fee for the vehicle. Those who owned their own cars outright were more likely to have a tertiary education (71% versus 41% for non-owners) and were more likely to have come to driving from formal employment (43% versus 29% for non-owners).

Finally, because the use of credit cards is not widespread in Kenya, app companies allowed direct payments to drivers in cash or mobile money. While this adaptation was a boon

³ Between 2015 and 2021, the exchange rate has varied between US\$1=KES 100 to KES 112, mostly hovering around KES 110 since early 2020 and the onset of COVID.

for ridership, it introduced some risk to drivers who had to collect cash or mobile money payments from riders (Wainaina, 2015).

Drivers in Nairobi experienced many of the same challenges as those elsewhere in the world as competition ushered in rapid changes in pricing (Calo & Rosenblat, 2017; MacMillan, 2022). By January 2020, there were 13,063 active drivers in Nairobi on Uber alone⁴ with at least one large competitor (Bolt) and a number of smaller players also in the market. In an effort to increase ridership, Uber cut per kilometer prices on the popular Uber X platform from KES 60 (about US\$0.60 at the time) in 2015 to KES 34 in 2016 and KES 27 in January 2018 (Macharia, 2018; Njanja, 2016; Wainaina, 2016). Perhaps in part due to the low availability of alternative livelihoods, the number of drivers on Uber more than doubled a year after initial fare cuts.⁵ Drivers and car owners bore the risk of changing fuel prices.⁶ App companies made their own decisions about how many drivers could participate on the platform, with impacts on drivers' utilization rates—how many trips they could expect to be given in a fixed time frame. The ratio of active riders to drivers fell from a peak of 67 in July 2016 to just 41 in January 2020⁷. In late 2019, drivers in our survey who already fully owned their own cars were working a median of 51 hours per week, with about 46% earning take home pay above the city's hourly minimum wage. Those who did not own their own cars fared worse, working a median of 58 hours per week, with only 13% of those with loans and 8% leasing cars from partners earning above the hourly minimum wage.

⁴ Data provided by Uber to the author on 7 April 2020.

⁵ Data provided by Uber to the author on 7 April 2020.

⁶ As a reference, fuel prices rose 17% between November 2019 and November 2021 with significant inter-month variation. (KNBS, 2021, 2022)

⁷ Data provided by Uber to the author on 7 April 2020.

While drivers complained about falling prices and utilization rates back in 2019, about half (52%) in our survey still considered the work better than their last job, and 19% said it was about the same. For others, digital driving was worse, but the better alternative was no longer available. In spite of strong GDP growth, formal job creation was at a six-year low in 2019 (Kenya National Bureau of Statistics (KNBS), 2019). Financial health and economic optimism were in decline amidst stagnating incomes and rising costs of living (Central Bank of Kenya et al., 2019).

5. An emic view of dignity

Seventy-eight percent of participants in our quantitative survey reported that, they found their work dignified. Segmenting those responses by age, gender, education, and car ownership arrangement shows that all groups of drivers had an overwhelming majority of members finding the work dignified. Those working for partners (and earning significantly less per hour) were less likely to report the work as dignified, but this was not a statistically significant difference. The only statistically significant difference in dignity reporting was by age with younger drivers less likely than older drivers to report the work as dignified (Table 4). This may reflect younger drivers' higher expectations for work opportunities.

Table 4: Disaggregation of sample reporting their work as dignified

Variable	% In sample indicating their work is dignified
Total sample	78%
Gender	
Women drivers	77%
Men drivers	78%
Education	
Drivers with tertiary education	76%
Drivers without tertiary education	79%
Car ownership	
Drivers who work for partners	75%
Drivers with loans	80%
Drivers who own their own cars	83%
Full-time versus Part-time	
Part-time drivers	79%
Full-time drivers	78%
Age	
Above 40 years old	86%***
Below 40 years old	75%***

*, **, and *** indicate p values at 10%, 5% and 1% respectively.

While these survey-based comments were brief, a few things stand out. Drivers finding their work dignified talked about the ways the work was professional and ‘legitimate,’ seeing digital driving as a step closer to formalization in a context marked by overwhelming informality in the labor market. Second, for both those finding the work dignified and those who did not, these feelings were tied to the ways workers were treated by their customers and by society,

more than by their direct interactions with app companies themselves. Reasoning reported for feeling their work was dignified or undignified was similar across sample segments.

Table 5: Why do you feel your work is or is not dignified? Coded responses from open-ended question. Only one main response coded for each respondent.

Why do you feel digital driving is dignified? (78% overall)	%*	Why do you feel digital driving is not dignified? (22% overall)	%*
It's professional	27%	Disrespected by users	59%
It's legitimate	18%	Low earnings	26%
Respected by users and others	16%	App company behavior	10%
Decent earnings	12%	It's unprofessional	5%
Cross-class interactions	11%		
It's self-managed	5%		
It's low-stress	5%		

*Shows responses with more than 5% of drivers in each category.

Qualitative interviews added much more richness to this understanding, demonstrating the ways digitalization was shaping driver experiences of dignity in the ways it structured relationships between drivers and customers, among drivers, and between drivers and the wider society. Major themes were similar across drivers in Nairobi and Mombasa, between men and women drivers, and across different car ownership arrangements. I observed three primary ways that digitalization affects drivers' subjective experiences of dignity:

1. Imposing rules and order in a context of high informality;
2. Discrete matchmaking between riders and drivers; and
3. Democratizing the livelihood opportunity.

5.1. Rules and order

Drivers told us that the rules and conflict resolution mechanisms that app companies put in place created an orderly environment that enabled drivers to act professionally and to be legible to riders and society as professionals worthy of respect. Drivers often reinforced this designation with their own behaviors. While in the Global North, digital driving is seen as a shift away from formal wage work, in Kenya, drivers typically contrasted their work with driving taxis or matatus, which are often associated with corruption, informality, and chaos in the popular imagination (Mutongi, 2017). In relation to modal forms of work, digital driving felt ‘formal.’ Drivers’ conceptualization of formality was not about having a registered business, complying with income and taxation laws, or enjoying worker protections and statutory benefits. Instead, it was about belonging to formal companies and abiding by fixed rules. They called their work ‘professional,’ ‘disciplined,’ and ‘legitimate,’ designating them as workers worthy of customers’ and society’s respect.

Apps were governed by rules about who could participate and how they must behave. They required driver background checks, driving licenses, insurance, identity documents, and sometimes even facial recognition confirmation from drivers. They tracked driver ratings, rider reports of misbehavior, and driver cancellations to suspend or expel drivers who broke rules. Rider identities were also recorded, though with significantly less rigor (Heeks et al., 2021; Isaac, 2019). Drivers felt a sense of professional pride around their numbers of completed trips, digitally-documented customer feedback, and ratings. This feedback was visible on the app and allowed drivers to show others, including riders, ‘proof’ of jobs well done. This contrasted other informal work that typically went unacknowledged. For example, one driver told me:

I wish I could send you some of the messages sent to Uber by the client. They say thank you for the tour, thank you for this and that, thank you for chatting, thank you for delivering the cake to the real place...therefore I love my job so much.⁸

A positive rating is proof to a driver that he or she deserves to be on the platform: 'That is why we have the driver's rating. From that we know if the driver is good or bad. If the rating goes down, they lock you for two weeks.'⁹

Several drivers told me that this has created broad-based social trust, which meant interactions with riders (and wider society) started from a place of respect.

We are very respected... Everyone trusts you to carry them. It's not like the old days, when the taxi driver might rob you and dump you or even kill you. We are getting attraction from the society, even in the slums. They know you are an app driver, and they trust you because app drivers are good people. They know you can deliver, that you will be honest.¹⁰

Digital tools—like rules and ratings—designed to make drivers legible and governable simultaneously made drivers appear more disciplined, trustworthy, and professional in the eyes of riders.

Many drivers went beyond adherence to app company policies and norms to signal their professionalism to riders. Not only would this encourage more respectful interactions, but it also

⁸ Interview, male driver, Nairobi, 3 April 2021

⁹ Interview, male driver, Nairobi, 12 March 2021

¹⁰ Interview, male driver, Nairobi, 18 September 2021

could lead to tips¹¹ and new clients for lucrative offline work.¹² Drivers spoke about the control they felt they had over a rider's experience when they stepped into the car. One driver explained:

I am running a business. The car is mine. The app, the only thing it is doing is sourcing the client. I am the one giving the service.¹³

A number of drivers talked extensively about the importance of developing customer service skills to reinforce their image as professionals. They learned to tailor their interactions for clients from a range of backgrounds and in a wide range of mental states. They considered it a skill to know who wanted to talk, which topics to avoid, and how to avoid provoking someone already on edge.

As another extension of their control, they ensured their cars were always clean and orderly. Eugene even wore a suit while driving:

When you treat yourself professionally, like dressing smart, having a clean car, clients will ask more about you. It rings a bell. They will not think you are 'just a driver.'¹⁴

That phrase, 'just a driver,' carried weighted meaning. Many drivers were sensitive to being viewed by others as 'just a driver,' connoting a type of worker with a modest skill, but still low status and little ambition, as if they had little else to offer society. These conversations often brought up contestation over the term *kadere*, a slang term drivers used to refer to one another in online discussions. The term is composed of the diminutive prefix, 'ka,' indicating something small and a shortened version of *dereva* [driver], the term overall indicating 'small driver.' While

¹¹ Tips may have been underreported in our survey, given that most riders pay in cash or mobile money, and are thus not captured by apps. An Uber representative told me that tips were very infrequent in this market (less than 2% of trips, according to the representative), but that may be in part due to low usage of cards.

¹² Driver ratings were not correlated with earnings in my survey data, likely because the ratings are used mostly to designate a threshold for driver suspension, not a mechanism necessarily to award more and better paying rides to highly-ranked drivers.

¹³ Interview, male driver, Nairobi, 9 March 2021

¹⁴ Interview, male driver, Nairobi, 21 September 2021

some used it in a warm, ironic way among one another, others found it offensive and believed it undermined political claims for better wages and greater voice in the industry.

In discussing this form of dignity, driver discourses intersected with ideas of autonomy and freedom discussed by other scholars (Anwar & Graham, 2020; Wood et al., 2019). Drivers felt that they had significant autonomy in enacting dignity through the ways they cared for their cars and customers and the ways they presented themselves. Ninety-eight percent of drivers in our survey reported “being one’s own boss” as an important benefit of digital driving. For them, this was about being individually in control of a client experience and individually recognized for a job well-done. The governance imposed by the apps was largely seen as an enabler of a more professional, rules-based environment rather than an oppressive ‘boss’ controlling drivers.

App governance varied across platforms, and with few exceptions, drivers felt stricter enforcement created better environments in which riders treated them with professional respect. On ‘App A’¹⁵, drivers were required to uniquely register their own details, and all documents (insurance, background checks, driving licenses, etc.) had to be kept up to date or the driver would be deactivated immediately. Reports of inappropriate driver behavior would also cause deactivation, but often, they said, App A would investigate the incident and consider both sides of the issue. Also, rules for customers were enforced; App A would deactivate riders for repeated breaches, including failing to pay a driver at the end of a trip or soiling a driver’s car. The company itself paid drivers when customers failed to do so. Drivers wanted even stronger controls on confirming rider identities and better processes for resolving disputes and appealing decisions. Almost universally, drivers preferred the strict governance of App A, because they believed it meant customers treated them with more respect. They also believed the system

¹⁵ App A and App B are both multinational companies operating in more than 40 countries. Both entered the Kenyan market between 2015 and 2016.

improved drivers' collective behavior, allowing them to reinforce expectations of a culture of professionalism, which, in turn, built trust among riders.

'App B,' on the other hand, more loosely managed their platform. While having roughly the same license and insurance requirements for drivers, enforcement was weaker. App B sometimes deactivated drivers for high levels of cancellations or for failing to remit commissions, but other forms of discipline were rare. Drivers complained that riders who failed to pay them at the end of a trip were not punished and that reimbursement could take months if it happened at all. Drivers bought and sold profiles to one another, with no identity checks managed by the app company, working around the app's loose algorithmic management.

Drivers complained that poor rule enforcement turned App B into a haven for 'bad drivers' and made good drivers behave badly, due to unmanaged stress. It also charged lower rates and offered frequent discounts, which drivers felt welcomed in undesirable, lower-income riders who also broke behavioral norms. Drivers explained these distinctions:

- With [App B], there are no conditions. They don't care about your documents. People even buy accounts from other drivers and keep using them. It is not secure ... All those drivers who messed up on [App A] and were deactivated for life have moved to [App B], and you will see they can even fight with their clients. They are not disciplined.¹⁶
- With [App A] clients you have mutual respect, because if there is a hiccup and one of you reports the other, there will be follow-up. So, you can feel safe.¹⁷
- Security for [App B] is zero.¹⁸

¹⁶ Interview, male driver Nairobi, 18 September 2021

¹⁷ Interview, female driver, Nairobi 22 September 2021

¹⁸ Interview, female driver, 22 September 2021

- I deleted [App B] a long time ago... Their rates are bad, and one of my worst experiences was from a client was on [App B]. They are very arrogant, rude, and they want to demean you. They bring you down to feeling too low and feeling unwanted in the society, and that is what I hate, someone demeaning me too much.¹⁹

Not only did App A impose penalties on bad behavior, shifting the norms of work, but it also improved conditions that incentivized behaviors viewed as ‘undisciplined’ and simultaneously undignified. For example, on App A, if a customer refused to pay for a trip, drivers knew that the company would reimburse them. There was no need to get irritated with the customer or insist on payment. ‘I just let [App A] sort it out,’ one driver explained. Matatu drivers, in contrast, had no such guarantee of pay from a parent company, incentivizing harsh treatment of non-paying customers. App A drivers had no need to race through traffic by breaking traffic rules; drivers were compensated for extra time stuck in traffic. They were also paid for time spent waiting for customers who delayed getting to the car, stopped to run errands or requested cars and cancelled after more than five minutes. In other words, a digital mediator—the app company—removed cause for disputes between drivers and riders, avoiding the indignity of drivers having to settle a dispute one-on-one, which was nearly always the case in less formal work.

While drivers preferred App A’s strict management, this came at a cost. App A charged drivers significantly higher commissions than App B (25% versus 20% in 2019).

The perceived order imposed by digital rules and rule enforcement made drivers feel their work was more professional and ‘legitimate,’ which they explained as something socially

¹⁹ Interview, male driver, Mombasa, 18 October 2021

respected, akin to the idea of ‘earning an honest living.’ In contrast to much informal work, drivers felt there were no blurred lines around the legality of digital driving. They had formal accounts with the app companies, driving licenses, insurance, and public service vehicle (PSV) badges, as required to operate on the platforms. If they chose, they could work the same days and hours every week, like a salaried job. One driver explained the social perceptions of his work:

Long ago before I even joined the yellow line cab,²⁰ people used to say taxi drivers are thugs. But nowadays, they take them as people who do any other normal job. I have seen people leave their offices and open apps ... They consider it as any other normal job.²¹

5.2.Matchmaking

The digital matchmaking aspect of apps delivered dignity gains through three mechanisms. First, it eliminated the indignity of publicly seeking out clients in humiliating ways. A common indignity of informal work was sourcing clients. Constant solicitation—especially in public—was degrading, seemingly coming from desperation. Many had worked as offline taxi drivers or were at least familiar with the practice of calling out to potential customers and considered it to be embarrassing and old fashioned. One group of digital drivers had a mocking name for these drivers, *taxi bubu*, mocking the constant yelling of ‘taxi’ to get customers. They called themselves *digital taxis*, signaling they were more modern and dignified. The digital platform allowed them the luxury of being able to be patient and wait for a private request that would come directly to their phones from someone who clearly wanted their service.

²⁰ These are cabs operating in the Central Business District.

²¹ Interview, male driver, Nairobi 12 March 2021

These private requests contributed to drivers feeling more like colleagues than competitors. No driver I spoke with felt that other drivers were his or her competition, even if they worried about a market ‘flooded’ with other workers. One driver explained:

You know on the platform, there is no way you will be competing with someone. You just receive a request and go to work. Even if we are several of us in a parking and waiting, a request only goes to one of us. There is not that competition of pull and push, that this is my customer.²²

Such professional camaraderie was not something drivers discussed as a source of dignity, but they did report that it made driving feel safer and happier. Drivers kept up constant communication on issues around traffic and security on WhatsApp groups. Smaller groups often pooled together to support one another’s welfare needs through group savings and emergency contributions.

Second, digital matchmaking forged new connections between drivers and riders who would not ordinarily interact, breaking down class and geographic barriers. Because digital drivers had no regular physical base, they received requests all over the city. Since users were drawn from a small pool of middle- and upper-class Nairobi residents and visitors, driving exposed drivers to high-status riders in high-status geographies.²³ Being accepted as professionals by these riders and being welcome in new spaces gave drivers a new sense of belonging in the city. They felt appreciated and respected, recognized for serving important individuals doing important things. Some believed that exposure to these types of people elevated their own mindsets, giving them new ideas or just ‘good vibes.’ One driver told me:

²² Interview, male driver, Nairobi, 18 March 2021

²³ Meeting new people was the most cited benefit of digital driving, cited by 98% of survey participants.

I could have spent my whole life and never entered into a big hotel, an embassy, the compound of a big house. I would have never carried a *mzungu* [foreigner, white person] or discussed things with them. Like now when I pick them, we are sharing something. It has given me so much exposure. I pick doctors, lawyers, and they give you maybe some words of encouragement, words of wisdom, and because of that I am brighter than before.²⁴

Another driver beamed with pride about carrying prominent people, including famous journalists, politicians, and celebrities, including the comedian Churchill and politician Rachel Shebesh. ‘I even have their phone numbers now. They give good tips, too!’²⁵ He could not imagine another opportunity to interact with such powerful people.

Several drivers talked about the thrill of getting to see new parts of the city or country that were difficult and expensive to access. One respondent, a former matatu driver said, ‘I even thought of myself as a tourist with trips taking me to places I had never been.’²⁶ This new exposure and being valued by prominent users seemed to give drivers a sense of purpose and belonging.

Impressing high-income clients also came with the potential of future work. Many talked about the importance of building clients’ trust so that they would call for lucrative, offline and long-distance trips. One driver who started in the early days of digital driving in 2016 has accumulated enough offline clients, that they now account for a large share of his income:

I don’t depend on the apps; I have my own customers. I got these clients over time from driving on the apps, and now that’s like 70% of my income. We negotiate the prices, and

²⁴ Interview, male driver, Nairobi 18 September 2021

²⁵ Survey participant, Nairobi, October 2019

²⁶ Interview, male driver, Nairobi, 22 September 2021

that pays more than the apps. I only switch on if I have down time. For example, I might take one of my *karura* [offline] clients to the airport and then I [switch the app on to] get a trip back.²⁷

Several drivers also leveraged their client relationships for professional work tied to their qualifications as lawyers, accountants, and real estate brokers.²⁸ One driver started driving as he was finishing law school and preparing for the bar exam. His own savings and some help from family helped him buy a car and drive in his free time in the evenings. When I asked what he enjoyed about driving, he said:

I met people! I had interactions with clients, made connections, some are very friendly. I can say I made friends. I made clients for my legal work. I can say like 15-20% of those I carried became clients for legal work. We would talk about me and the other things I was doing, and it would come up. I would give them my card.²⁹

Drivers valued not just the social respect of their clients but what that respect could mean for their earnings from driving and the possibilities to build income streams outside of this work.

Finally, digital matchmaking provided a steady—if insufficient—stream of clients, meaning relatively steady incomes. Apps connected drivers to a ready pool of customers, allowing them to obtain about eight trips per day with requests pretty consistent throughout the week and month. In offline driving, one was restricted to a small network of personal clients or riders who happened to pass their fixed geography. They might wait all day and get only one or two customers. The steadiness of income from digital driving was dignifying, making their work appear more job-like and therefore more respected by others.

²⁷ Interview, male driver, Nairobi, 16 March 2021

²⁸ 46% of survey participants had tertiary education.

²⁹ Interview, male driver, Nairobi, 21 September 2021

One former matatu driver who spent most of his life in a slum bordering the wealthy neighborhood explained:

Most of us are poor. I have never walked out every morning sure that I would do a job.

But now I know that if my car has been serviced and my phone is charged and working, I am going to work and not to some charity job. I used to wait at the base all day without getting a customer. Now, you cannot go an entire week and every day is bad. At least two, three days are going to be good for you... You are going to get money, and psychologically, you can relax. You know you will get requests... I carry my lunch, so people see me leaving the house every morning with my lunch and they think I am going to an office job. They know I am going to work. They respect me because they know there is something I am doing every day.³⁰

This is ‘a job like any other,’ drivers would say, referencing the small, but important dignity that comes from earning an honest, reliable living in a city where many instead define their work as ‘hustling’ and ‘looking for money,’ in ways that involve a range of dignity sacrifices (Thieme et al., 2021; Zollmann, 2020). For many drivers, the ‘flexibility’ they appreciated in digital driving (97% of survey respondents saw flexibility as an important benefit of their work) was not just about setting one’s own hours, it was also the ability to work more hours to make more money in a context in which many workers do not earn enough to care for their families and lack the option of bridging the gap by simply working longer hours. Flexibility also meant the freedom to tend to social obligations and pick up higher earning gigs when those opportunities appeared. That kind of opportunistic income generation is impossible for most of the formally employed whose time is tightly controlled.

³⁰ Interview, male driver, Nairobi, 18 September 2021

5.3.Democratizing opportunity

A final way that digitalization enhanced dignity experiences for drivers was by significantly lowering barriers to entry into taxi driving. In some ways it also brought car ownership—an important asset, status symbol, and social achievement—within reach.

The digitalization of client sourcing and pricing led to a decline of the fixed bases of the past, where taxi drivers had to pay to join a parking area and were often discouraged from joining by costly hazing and expensive joining fees. These bases functioned like small, local cartels limiting the numbers of drivers permitted to join, setting prices together, and establishing rules about which taxi would be permitted to take the next client arriving to the base. Drivers were often under-utilized with the exception of those who had developed an extensive client base over many years. With apps, any driver with a car could register and start working without the additional cost of joining a base and building a customer list from scratch.

The new apps—and the market's response to them—also made vehicles more accessible, lowering another key barrier to entry. First Uber, then the subsequent apps, separated the role of partner (car owner) and driver. In the early days of its entry, Uber facilitated matchmaking between partners and drivers. Since then, drivers and owners have modified these arrangements, informalizing and scaling matchmaking through social media and the wide offline networks among drivers and owners who know each other as friends and family. The result is that qualified drivers (those with at least five years of driving experience and a Public Service Vehicle, PSV, license) can easily find an available vehicle, join the sector, and immediately start earning.

Some drivers have also found the pathway to car ownership has become less steep. Some apps have arranged direct vehicle financing for drivers through local banks, based on data on their driving and earning history. Even without these formal linkages, banks, SACCOs (credit unions), and car dealers have been willing to finance vehicles, confident in the expectation that digital drivers would have fairly stable earnings enabling them to repay the loans.³¹ As the platforms reduced the required engine size of participating vehicles, the total need for financing also fell from around KES 1 million in the early days to about KES 750,000 or even less by 2019.³²

Drivers reported that vehicle ownership differentiated them from peers and workers in other sectors. They had an asset—a big one—which signaled they were not just workers, but entrepreneurs, with the discipline to turn small cash flows into a large investment. Owning a car elevated their social identity as someone who was ‘going somewhere.’ One respondent told us:

Growing up, I thought vehicles were owned only by the rich, but now digital driving has provided a means for me to own one and earn the respect of society.³³

For David, a driver and association leader, ownership differentiated digital taxi drivers from other transport workers:

Motorcycle guys go from poor to very poor. Matatu drivers are going from poor to very poor. But taxi drivers have always been going from poor to middle class, because owning a vehicle, that’s an asset.³⁴

³¹ Once registered on the platform, vehicles did not age out or affect driver ratings, but over time would need more maintenance. Typically, drivers who had repaid a loan had little trouble replacing these cars as even selling the old car would provide at least half the sum needed for a new purchase.

³² As of late 2021, qualitative discussions showed that a number of drivers were buying used vehicles for less than KES 500,000 for use in the business.

³³ Survey participant, Nairobi, October 2019

³⁴ Interview, Nairobi association leader, 9 September 2021

David explained that such elevation stemmed from the size of investment, enormous in comparison to a motorbike. Being able to purchase a car changed your status not by just the value of the car, but because by buying one you proved your ‘discipline’ and ‘focus,’ accomplishing such a momentous task.

5.4.Dignity undermined

While digital driving opened new opportunities for drivers to pursue dignity gains, drivers told us those opportunities were contingent on apps’ own rule enforcement and on decent pay. While apps—especially App A—connected drivers to high-status riders, drivers felt that lower fares and the discounts offered on App B have drawn lower status riders into the ecosystem. The combination of lower income/status riders, lower fares, and the lack of rule enforcement undercut drivers’ feelings of dignity. In drivers’ experience, these lower status clients more often refused to pay or otherwise ‘misbehaved’ by using harsh language, overloading the car, or asking for unpaid stops on the way to their destinations. Some resented that individuals of lesser means, ‘matatu people’, could use their services at all:

[App B] picks everyone including *chokoras* [street children].³⁵

Negative experiences with riders across all apps were infrequent. But drivers attributed the occasional incidences of such behavior to these riders’ lower status and their disregard for the behavioral norms that drivers felt App A inculcated among its higher-status users.

Part of the political message of driver association leadership has become that digital taxis fares should go up, because private taxis should remain a ‘luxury’, reserved for wealthy users.

³⁵ Interview, male driver, Nairobi, 10 March 2021

When I started this business, it was classified as a luxury. ... If that phrase of ‘a taxi is a luxury’ is owned by everybody in Kenya, I think we will get better pay.³⁶

Taking a loan to buy a vehicle to run on the platforms has not led to universal shifts in status, due to the volatility in earnings from both changing market conditions and the vagaries of price and utilization rates set by companies in a market of intense, unregulated competition. When drivers took loans, they made those long-term decisions based on conditions that quickly changed. App companies cut prices and utilization rates and often re-engineered promotions and service tiers—usually to the detriment of driver earnings. Changes were particularly stark during the pandemic as fuel prices surged amid falling customer numbers and lower ride prices. Journalists reported anecdotally on large numbers of ride hailing vehicle repossessions before and during COVID (Muchira, 2019; Mwita, 2020). Repossession was not common in our sample, but was devastating when it did happen; drivers had often already paid for more than half the vehicle cost before losing their asset entirely.

These difficult circumstances also strained efforts by driver associations to organize and pressure app companies to raise rates. Drivers desperate to make loan payments found it difficult to sustain strikes. Those attempting to resist by breaking app rules sometimes found themselves blocked from the apps and unable to generate enough offline revenue to pay their loans. This gave rise to internal divisions among an otherwise unified association of drivers in Mombasa.

Falling earnings jeopardized dignity gains. Lower prices widened power gaps between riders and drivers. For example, low prices meant that some clients sent drivers to do menial tasks, which drivers found degrading. A driver in Mombasa complained that one client connected with him on an app, and for just KES 200, he was sent to go pick the clients’ dogs and

³⁶ Interview, female association leader, 24 September 2021

bring them to the client's house. Not only was carrying dogs in the car viewed as taboo, simply getting the car vacuumed afterwards cost KES 500.

Declining fares across apps undermined the image of professionalism drivers worked so hard to uphold. Instead, drivers felt they looked desperate, which made them vulnerable to being demeaned by clients. One respondent explained:

I don't see how I am going to carry a client from here to town and the client pays me KES 200. The client will see you as very desperate; that is why you are receiving the KES 200. But, if you carry a client from here to town and he pays you KES 1,500, that client will respect you ... Because if I pay you KES 200, I see you as worthless. You are just a desperate person. I am just helping you.³⁷

Another recounted two specific recent incidents that were so demoralizing that he was ready to walk away from work he otherwise enjoyed:

Before, I liked digital driving. When they changed the rates, I lost my pride. ... Nowadays it's not dignified. Clients talk bad about us right in front of us. Two weeks ago, it was a hot, sunny day, and I'd been on the road for many hours. I didn't have time to go home and refresh. I was smelling sweaty. I keep a roll-on [deodorant] in the car, but I guess I was still not smelling okay. And the client was like, 'You know the problem with you people is you stink. You don't shower.'³⁸

Low prices changed the ways that drivers worked, creating incentives to subvert the very platform rules they felt made the space professional and dignified. For example, very low margins meant that drivers had to be careful about accepting trips that might entail a lot of dead

³⁷ Interview, male driver, Mombasa, 18 October 2021

³⁸ Interview, male driver, Nairobi, 16 March 2021

mileage. Thus, many drivers started to systematically call riders upon a new request to find out where they were going and discuss the rate. If the trip would not be economically viable for the driver, he tried to negotiate with the client around the price and asked them to cancel the trip, taking them offline, or *karura* (Iazzolino, 2021). While the practice helped protect drivers' earnings, it reintroduced the indignity of haggling, and frequent app cancellations could get drivers suspended.

6. Discussion

This article used Kenyan digital drivers' emic experiences of subjective dignity in their work to explore the often-observed paradox of drivers—particularly in the Global South—assigning liberatory rhetoric to a form of work with objectively low pay and significant algorithmic control. In drivers' narratives, we hear echoes of the work of previous scholars recognizing the heterogeneity of worker experiences (Berger et al., 2019; Holtum et al., 2022; Monteith & Giesbert, 2017), the importance of relationality in work experiences (Khan et al., 2023), and the ways that workers themselves reframe their work and enact their own dignity (Deery et al., 2019; M. Ference, 2016). Drivers spoke about dignity as both a relational concept, especially in relation to customers, and as feelings of self-esteem, both of which are influenced by structural conditions including app governance and pay.

Drivers' dignity gains are relative to the counterfactual opportunities available in their context (Dawson, 2022; Pollio, 2019), one marked by pervasive indignities caused by informality, inequality, lack of earning opportunities, and a dearth of genuinely good jobs. In that context, drivers see the Foucauldian disciplinary effects of algorithmic management (McDaid et al., 2023) as a welcome imposition of order, instead of a source of oppression. Drivers felt that

digitally enforced requirements for driving licenses, insurance, inspections, background checks, and ratings made them legible not just to capital, but to riders and society. The orderliness of the sector, they believed, made them more respected as trustworthy professionals. Rather than representing a shift towards precarity, the stable customer base and digital matchmaking of ride hailing provided many drivers with a more reliable livelihood, and one in which earnings could increase through greater investment of time, making it ‘flexible’ in ways counterfactual livelihoods were not.

Thus, we see that drivers’ experiences are not just heterogeneous due to their personal backgrounds and preferences (Berger et al., 2019; Holtum et al., 2022), but also due to the varying contexts in which they are situated, both shaping counterfactual opportunities available. For Kenyan digital drivers, platform-mediated work felt like a step towards formalization and a ‘real job,’ rather than a sign of rising precarity and informality, as it is often viewed in the Global North (Malin & Chandler, 2017; Schor, 2020).

This article demonstrates the way that digitalization in this sector has structured offline social interactions in some interesting and complex ways. Through professionalization, matchmaking, and greater access to vehicles, platforms were able to make a stronger pathway for social inclusion for drivers. Drivers felt that barriers dividing them from high-status social classes and geographies were removed, increasing their own sense of importance and belonging. However, they resented that low prices and discounts made taxi services more accessible for lower status riders, including students, young people, certain minorities, and even those wishing to transport pets. Drivers’ own status gains were partly contingent on serving an exclusive pool of riders, one primarily composed of high-status riders.

That digitalization ushered in new dignity through matchmaking and lowering barriers to asset acquisition tells us as much about the painful indignities of underdevelopment and informality as it does about the merits of digitalization. In revealing the ways that apps lowered barriers to entry, drivers showed us the pain of informal exclusions from trade and commerce. In discussing the ways matchmaking turned taxi driving from an unpredictable to a relatively stable source of income, drivers showed us the stress and disrespect associated with hustling in the informal economy. Showing up to work and turning on a well-governed app provided some relief from the humiliation of having to shake loose opportunities on one's own, to beg for work, and to enforce customer payment on one's own in undignified, uncomfortable ways. It connected those 'looking for money' to those who had it, something that cannot be taken for granted in spaces of high inequality and economic segregation.

While drivers valued the benefits of digital order, they also complained about low prices. Low prices made it more difficult for drivers to experience the material dignity of being able to adequately cover their family's living expenses and sometimes maintain the respect of family and neighbors. Drivers typically blamed app company greed and misaligned incentives for these lower prices than the technology itself. And low prices incentivized drivers to subvert the very forms of digital order that delivered important dignity gains.

7. Conclusion

Drawing on the experiences of digital drivers in Kenya, this article has demonstrated the ways that digitalization of work can enhance workers' experiences of dignity by bringing welcome order to largely informal market interactions, matching buyers and sellers of labors, and democratizing opportunity by lowering barriers to entry. I have also shown the ways that these gains can be undermined by lax rule enforcement and low pay. Understanding the nature of

these dynamics is important for appreciating what exactly digitally mediated work may be able to deliver for workers from a development perspective.

As best I can tell, digitalization of taxi services may have created some modest growth in work opportunities in Kenya. It is not a solution for Kenya's mass unemployment and underemployment challenge. And with low pay, constantly shifting prices and terms, and the variation in app rule enforcement, I am not arguing that digital driving is objectively *good* work. What drivers are telling us is that, in their context, it can be *better* than alternatives. And it is the specific ways digitalization has been deployed—by imposing rules and order, enabling matchmaking, and democratizing opportunity—that has made it so.

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Declaration of interest statement

The author reports there are no competing interests to declare.

Data availability statement

The specific quantitative data that support the findings of this study are available on request from the corresponding author. Income data are not shareable due to research participant fears that their identities could be deduced from this data. We do not have permission from participants to share qualitative interview transcripts and notes outside the research team.

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