

Introduction

- "Uber is a data company, I mean they're tracking everything that you do...so they're monetizing that data in some form or fashion." – P8
- Workers are initially attracted to gig work platforms because of the freedom and flexibility to control your own work.
- Gig working platforms have an inherent uneven information, and thus, power asymmetry, resulting in precarious and unfair working conditions
- Workers are shut out of the conventional design process, leaving drivers eager to give feedback,
- Three primary facets of well-being: psychological, physical, and financial
- Little work has been done investigating alternative approaches to platform design, and we, with drivers, proposed 3 alternative pathways.

Research Goals

- Expand research on gig workers' expectations and experiences related to algorithmic management, with emphases on well-being and fairness.
- Present solutions to the identified issues as imagined by gig workers created through participatory design sessions.

Methods

P	Focus Group	Design Session	Age	Race	Gender	Gig-work Tenure	Hours per Week	Other Job?	Platforms Worked (primary as first)
1	✓		52	Asian	Male	2-5 years	15 - 30	Yes	Uber
2	✓		64	White	Female	2-5 years	45 - 60	No	Uber, Lyft
3	✓		46	Black	Male	5 years+	30 - 45	Yes	Lyft, DoorDash
4	✓		31	Hispanic	Male	5 years+	0 - 15	Yes	DoorDash, GrubHub, Roadie
5	✓		49	Asian	Male	2-5 years	0 - 15	No	Uber, Lyft
6	✓	✓	50	White	Female	2-5 years	15 - 30	Yes	Uber, Lyft
7	✓	✓	46	White	Male	1-2 years	30 - 45	Yes	Uber, Lyft
8	✓	✓	35	White	Male	1-2 years	15 - 30	Yes	Uber, Lyft
9	✓		44	Hispanic	Female	2-5 years	15 - 30	Yes	Uber, UberEats, DoorDash
10	✓		32	Asian	Male	2-5 years	45 - 60	No	Uber, Lyft, Flash, DoorDash, GrubHub, Amazon Flex
11	✓	✓	33	Asian	Male	3-6 months	45 - 60	No	Uber, UberEats
12	✓	✓	27	White	Male	1-3 months	30 - 45	Yes	Uber
13	✓		30	Black	Male	2-5 years	45 - 60	No	Uber, Lyft
14	✓	✓	27	Black	Female	5 years+	15 - 30	No	Uber
15	✓	✓	27	White	Male	1-3 months	15 - 30	Yes	Uber
16	✓		32	White	Male	1-3 months	0 - 15	Yes	Uber
17	✓	✓	28	White	Non-binary	1-2 years	30 - 45	No	Uber, DoorDash
18	✓	✓	29	Hispanic	Female	2-5 years	30 - 45	Yes	Lyft, Uber
19	✓	✓	50	White	Male	1-2 years	60 +	No	Uber, GrubHub, Instacart
20	✓		40	White	Male	5 years+	15 - 30	Yes	Uber, Roadie
21	✓	✓	34	White	Female	2-5 years	30 - 45	No	Uber, GrubHub, DoorDash
22	✓		43	White	Female	6-12 months	15 - 30	No	Lyft
23	✓		35	Black	Male	2-5 years	30 - 45	No	Lyft, Uber
24	✓		30	Black	Male	2-5 years	30 - 45	Yes	Uber

Fig. 1 Participant demographic and background information

Partnered with national driving union and recruited online

24 unique participants

8 remote focus groups / individual sessions – 90 minutes each

4 remote participatory design sessions – 90 minutes each

Intentionally wide-sampling of gender, race, age, tenure, and platforms.

Figures and Results

Problem	Solution Themes	Involved Entities
Unaddressed Well-Being Support on Platforms	Data-Driven Insights in Support of Worker Well-Being, Well-Being Centered Nudges	Workers, Platform
Unfair Differentials Imposed By Gamification	Flexible Incentive Configuration, Rewarding Driver Loyalty	Workers, Platform
Uneven Information Access	Translucency in Task Assignment, Improving Information Visibility Between Drivers and Riders	Workers, Customers, Platform
Working and Learning in Isolation	Collective Information Sharing for Investigation & Advocacy, and for Driver Support & Knowledge Building	Workers, Customers, Platform

Fig 2. Addressing algorithmic management shortcomings with workers

Identified Problems

Unaddressed Well-Being Support –
“When I get a much lower rating... asking myself, what went wrong? That will be affecting my psychological well-being.” – P13

“Uber discourages you from taking that long view of the past month or the past few previous months. It does remain very weekly focused.” – P11

Unfair Differentials Imposed By Gamification –
“It's like a stupid video game where they're trying to keep you from winning.” – P6

Uneven Information Access –
“They definitely treat it like it's a perk when it's kind of a necessity.” – P3

“It's [driver data] probably already being tracked and monitored and sold to somebody else, so there's not much else we can do about it.” – P12

Working in Isolation –
“They're very quick to deactivate and are not necessarily in a hurry to get back with you. They don't seem to really fully appreciate the importance of our income” – P19

“It's a bit of a panic mode because you may have been working to pay off a bill or something ... but when you're just kicked off, you don't know how long you're going to be in that state.” – P2

Proposed Solutions

Data-Driven Insights & Well-Being Centric Nudges –
“I should have a water and snack maybe' instead of just focusing on 'I have to earn money all the time.'” – P12

“You [drivers] might as well use that app or use that data to work towards a more fair and equitable and moderated understanding” – P17

Flexible Incentives & Rewarding Driver Loyalty –
“It could be like building a personal pizza. You can have almost a 'select your menu' or 'build your own Quest'.” – P6

Translucent Task Assignment –
“I don't know if I'm interested in destination. If I'm going to take a trip, I'd love to know what direction it's going in and about how far.” – P6

Collective Information Sharing –
“If it's just you vs. the company, your story doesn't have much weight. But if you have a collective group providing some metrics or data?” – P20

“Our communication network is pretty flimsy and non-existent, and so we don't really have the strength in numbers that you see in a lot of workplaces because we're so isolated.” – P19

Conclusion

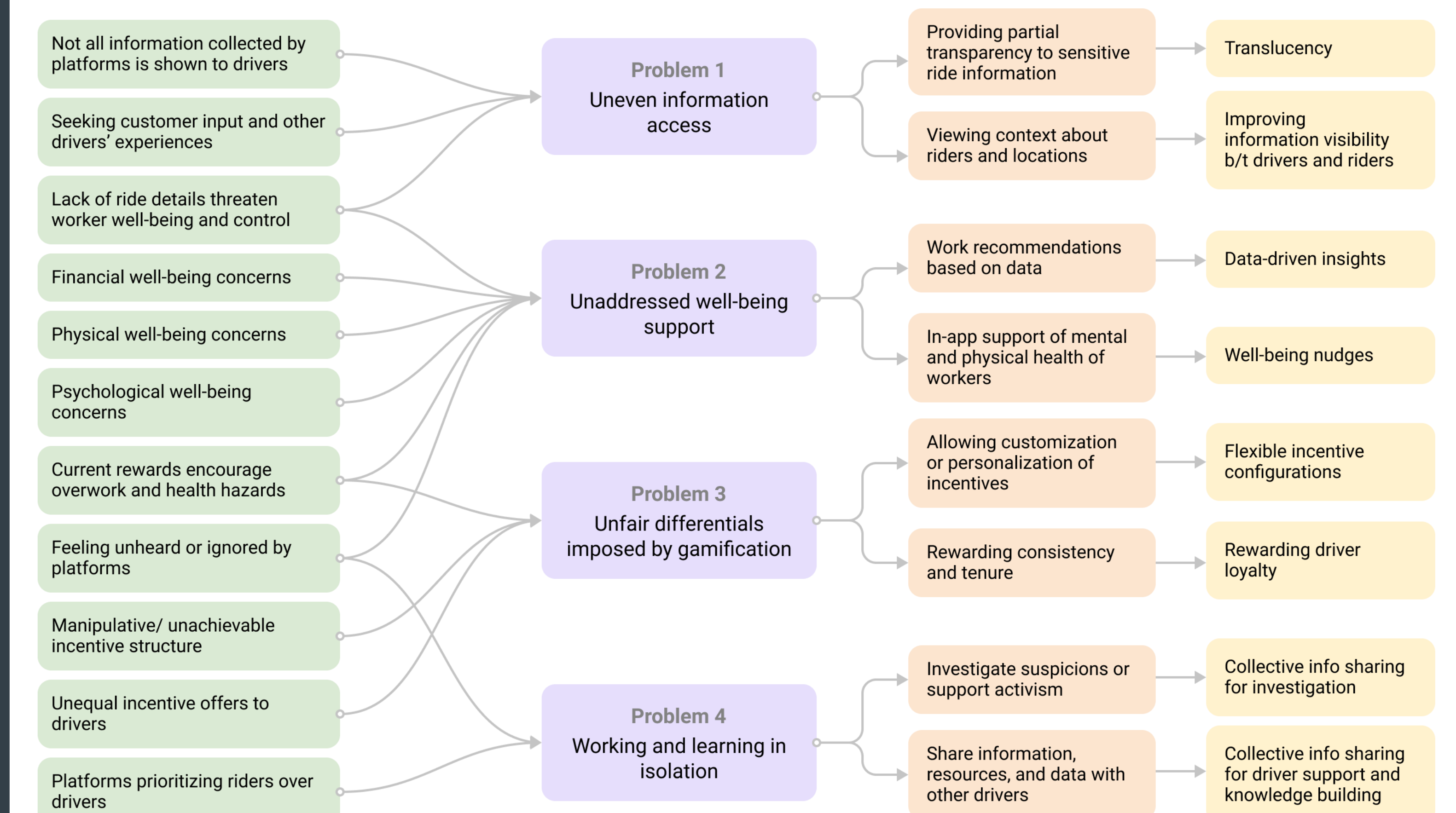


Fig 3. Simplified thematic analysis of the findings

- We built on existing work by eliciting driver-imagined solutions for a more nuanced and granular exploration of those problems.
- Our findings indicate more imaginative & creative methods to mend the broken psychological contract and presents concrete steps forward.
- Additionally, we explored the concept of 'fairness' and how it relates to the three well-being facets to drivers.

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