Perceptions of Fairness in Technology-Mediated Marketplaces

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Tipping in third-party food delivery

How much should I tip?

How does my tip affect how the driver is paid?

Does my tip benefit the company?

DoorDash's "guaranteed minimum" policy

In 2019, under DoorDash's "guaranteed minimum" tipping policy at the time, drivers did not always receive their tips in full.

- Drivers who received a below-average tip received a top-up from DoorDash
- Drivers who received an above-average tip saw their base pay reduced

DoorDash faced strong pushback after a New York Times investigative report, despite this policy having been active since 2017.

My Frantic Life as a Cab-Dodging, Tip-Chasing Food App Deliveryman

By Andy Newman

July 21, 2019

The New York Times

DoorDash Changes Tipping Model After Uproar From Customers

The delivery company dropped a policy that effectively meant tips were going to it rather than workers.

Technology-mediated marketplaces

Gaps can emerge between consumer expectations and how marketplaces operate

Consumers increasingly interact with other economic actors through marketplace environments managed by third-party companies.

We describe these as *technology-mediated marketplaces* (TMMs): environments constructed and managed with code where third-parties structure recurrent exchange between buyers and sellers.
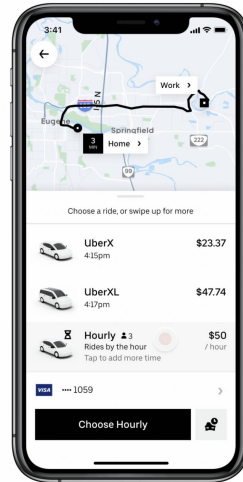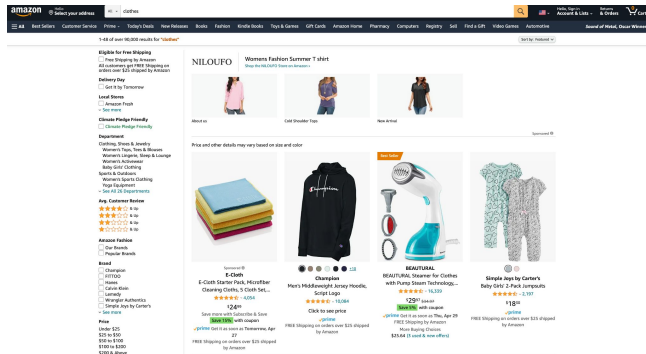
Findings

Tipping in third-party food delivery to examine TMMs

RQ1: How do consumers describe what is or is not fair when tipping in third-party food delivery, compared to tipping in non-TMM environments?

RQ2: What role do TMM companies play for consumers in determining what is or is not fair when tipping in third-party food delivery?

Methods

Interviewed 25 users recruited through the UC Berkeley Xlab between Dec 2020-Feb 2021

- 45-90 minutes in-depth, semi-structured interviews
- Roughly equal who identified as female (12) and male (13), across four different age groups (18-24, 25-34, 35-44, 45 and older)
- DoorDash, UberEats, Grubhub, Instacart, Chowbus and Caviar apps used

Ask participants explicitly to compare tipping in third-party food delivery and non-mediated contexts

Attitudes, motivations and beliefs around fairness in tipping

Data analysis

Two authors identified and excerpted participant responses related to attitudes, motivations, beliefs, and practices around fairness in tipping for all 25 interviews.

Same two authors conducted a first cycle of initial and in-vivo coding to identify a broad range of attributes related to fairness and tipping, resulting in 396 codes.

We then conducted multiple iterations of pattern coding that resulted in 54 higher-level codes such as "distribution of costs", "allocation of responsibility", and "opaque company practices".

We organized these codes into the three major themes we discuss.

How consumers perceive fairness in tipping in third-party food delivery

1. **Fairness as providing a living wage**
2. **Fairness as reciprocity**
3. **Fairness as fair distribution of payments**

1. Fairness as providing a living wage

Tipping as a way to support living wages for workers

Ambiguity and unclear norms in how much to tip:

> "I mean, I always felt uncomfortable, you know, **I always wanna play by the rules, but then when kind of the rules are vague… I just want to pay and get what I'm supposed to get and not have to play a game.**" (P14)

Perceived lack of transparency in how tips affect driver compensation:

> "I also feel like, how much needs to be offloaded onto people? … Why do I have to make sure the driver's being paid properly? **I mean, come on, I'm just buying some food**. So I kind of feel like, yes, repeatedly pushing these things, decisions, and it's my responsibility to make sure the guy's getting paid properly… I like the idea of more information, transparency, **but I'd just like it to be just more ethically straight up, [where] the consumer doesn't have to police it themselves.**" (P5)

Lack of interaction and connection between consumers and drivers

"**You have your option to tip before you're told your driver's name, you don't know anything about your driver**, and especially during COVID, you don't even see your driver most of the time. I live in an apartment building, so like my driver has just texted me and said, "Oh, I left your order on the front desk like you said," so then I go get the order, but I don't see the driver, I don't know what kind of car they drive. I, you know, I don't see them driving up or anything like that. **I have no connection to them**." (P10)
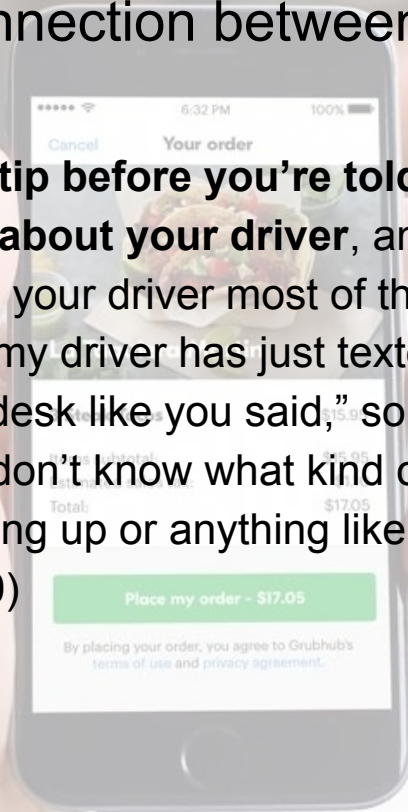
Experiences pre-and post-COVID

"I actually used to chat quite a bit with the drivers before because I'd sit out on the front porch and wait for them to appear with the food and then, you know, chit-chat with them a little bit before they headed off." (P3) She sometimes would tip them more if she felt they "were having a bad day."

"[I]t's very different because **that aspect of tipping has been removed by the pandemic**. **We don't have that personal interaction or... perception of someone else's situation...** You know, some days you could tell if they were having a bad day. You know, it's just on the facial expressions. Um, **and so by having the contactless delivery, I don't actually ever see that.**" (P3)

Interchangeability of drivers and association of drivers with gig economy companies

"**Well, the thing is... Uber and Grubhub... are always going to find a driver.** These restaurants, you know, they're owned by actual people. You know, you actually talk to some of these people, and they put their livelihood [sic] and stuff... Yeah, with the drivers, there's **just less connection with the person**. Even though I do feel sorry for them because they have to work at such companies, it's just... they're **part of this machine which are these large institutions**." (P22)

2. Fairness as reciprocity

Tipping as a way to normatively reciprocate the costs and efforts of individual service workers

"So tipping is about service, right... so if you have a really good waiter who's attentive... theoretically you tip more. And... you have that interaction throughout the service where you can make judgments and see how things work. That's, you know, how you tip your bartender, or your waiter or waitress... right? **Because you have that interaction where you see how they perform.**" (P2)

Sequence of tipping affects whether tipping is viewed as reciprocal

"**I think probably because the payment part happens before you get your food, so I just kind of do it then... and it's not influenced by my experience**, whereas at like a restaurant I'm paying after I'm being served and I have my experience at the restaurant. **So I'm more inclined to [tip the same amount using third-party food delivery services], I guess my tips are more variable otherwise.**" (P15)

Accountability and conflation of responsibility

P22 recounts an incident where he tipped a driver poorly due to an incorrect order, explaining how he felt at the time there "**needs to be some kind of consequence**":

"Well, it's more… It's just like anger at that point. Yeah, it's not really thinking. I guess if I were to really think about it, it's like the driver has nothing to do with it. **Usually I associate the driver with the restaurant… but they're two different entities.** But, uh, yeah, I guess I really never thought about, you know, them not being connected." (P22)

App facilitating more detached interactions

P25 ignored calls from drivers to avoid leaving her apartment

She described attempts to avoid or reduce interaction with drivers after such incidents: *"I don't meet them. I just say [through the app] like, 'Leave the food at my door.'"*

"It's part of work, right?... I mean it's like doing any kind of work, you're gonna encounter troubles. And this is part of the routine. Why... I mean there's nothing worth complaining about. **It's just part of your work (laughs)**." (P25)

3. Fairness in distribution of payments

Fairness of how TMM companies distributed payments, including tips and fees, between drivers, restaurants and the TMM companies.

Multiple fees decrease desire to tip:

"So, I think in the beginning I saw, like, double fees, like almost twice as much, and I was not incentivized to tip. My thought process was, they're already getting paid by Uber Eats. **Why am I paying them more when they're already making money on this service?**" (P11)

Subtotal	$20.40
Regulatory Response Fee ⓘ	$2.60
Delivery Fee	$2.99
Service Fee ⓘ	$3.06
Tax ⓘ	$2.01
Dasher Tip	$7.00
Total	**$38.06**

Fees to restaurants:

"Especially during the pandemic, a lot of food delivery services are like, "Oh, you should support your local restaurants by using our food delivery service." ...It seems disingenuous to me to charge a service fee while also charging the restaurant. **Like you're taking money from every single person in the equation here.**" (P23)

Opposing ways consumers incorporate the role of TMM companies

Tip less to avoid benefiting corporations:

"Am I going to give more money to that person? At the pizza joint? Yes. Versus the person with the Uber delivery driver? Yes, I would rather give my money to the person working directly for the restaurant. Because it's the restaurant that's directly benefiting, and that person versus, you know, this corporation, this Uber, DoorDash, Grubhub... I want to help out, you know, mom-and-pop pizza shop. **I don't want to help out who the new CEO of Uber is.**" (P1)

Tip more to make up for intermediary

"There's like this giant tech firm in the middle now… and so just having one more player, it means that the cost goes up. So the only way to bring the final cost in line with what people expect is by taking money from drivers and restaurants. **So I think people just need to get used to paying more.**" (P23)

Discussion

Discussion

Aspects of TMMs that complicate fairness in economic action

- Codified interaction and the changing social meaning of tipping
- Perceptions of TMM companies as for-profit, third-party mediators
- Difficulties in assessing accountability in managed complex systems

How the design of TMMs can shape how consumers relate to workers

Codified interaction and the changing social meaning of tipping

Decision to tip *before* delivery changed how consumers view the social meaning of tipping

Participants describe how they tend to view the tip less as an act of reciprocity and more as an obligation to provide a living wage.

Gig economy researchers have noted a shift away from a "sharing economy" facilitating social exchange and reciprocity towards a more transactional model based on convenience and efficiency

- Study describes how such a shift is taking place around tipping in food delivery

Consumer perceptions of TMM companies as for-profit, third-party mediators

Economic decision-making taking place in marketplaces managed by third-parties is different

Participants were overtly aware of TMM companies as mediators and incorporated their perceptions of TMM companies in their interactions with drivers

Consumers view their tips not as a dyadic exchange between consumers and drivers, but as an interaction monitored and evaluated by TMM companies

Desire to support drivers with tips can be offset by a desire not to benefit TMM companies

- P23 felt consumers needed to tip more to make up the difference
- P1 chose to tip third-party food delivery drivers less than drivers directly employed by "mom-and-pop" restaurants

Assessing accountability in managed complex systems

TMMs provide complex coordination among different actors

Limited affordances and information available for consumers

- P22 feels there "needs to be some kind of consequence" for poor service

Elish (2019) describes "moral crumple zones" where individuals can often bear the brunt of wider system failures in the case of automated vehicles

Similar difficulties in assessing accountability in TMMs, where blame for app or restaurant delays/errors can be placed on individual drivers

How TMMs can distance consumers from workers

Perception of greater autonomy not the only factor explaining lower tips (Duhaime and Woessner, 2019)

Apps that prioritize convenience reduce interaction with drivers and lead some consumers to feel "no connection" to drivers (P10)

Anonymity and interchangeability of matching with drivers through a labor marketplace, and low likelihood of repeated interactions

Association of workers with TMM companies and reduced sense of obligation

- Etc. P22 describes how "*Uber and Grubhub... are always going to find another driver,*" and his tendency to view drivers as "*part of this machine which are these large institutions*"

How is technological mediation affecting marketplace behavior?

Consumer decision-making is different in TMMs

Distinct aspects of TMM environments that affect decision-making

- Codified affordances influence how consumers view social meaning of interaction
- Consumers actively consider role of third-party mediators when interacting with drivers
- Assessing accountability is difficult in TMMs

Conclusion

Jackson et al. (2014) describe the process of 'stabilization' or 'closure' through which "emergent technological artifacts and practices take on their more settled and durable forms".
- Study provides snapshot of this process around tipping in third-party food delivery

Most participants chose to tip before delivery and not adjust their tips.

Many describe a reduced sense of connection to delivery workers.

Need to pay attention to how technological mediation is shaping consumer decision-making and how consumers relate to workers.

References

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Elish, M. C. (2019). Moral crumple zones: Cautionary tales in human-robot interaction (pre-print). *Engaging Science, Technology, and Society (pre-print)*.

Jackson, S. J., Gillespie, T., & Payette, S. (2014, February). The policy knot: Re-integrating policy, practice and design in CSCW studies of social computing. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 588-602).

Acknowledgments