Ethical implications of Uber's algorithmic nudging practices in relation to the workforce *K Vanoppen. LSE student FORGOOD project supervised by Prof Liam Delaney*

Context

Algorithmic nudging is the process of deploying machine learning algorithms to change individual's decision-making using data about their preferences, choices and beliefs.

Many employers are now using algorithms to influence their workers. **This case study explores Uber's use of algorithms and their impact on workers through the lens of the FORGOOD ethics framework.**

How are employers using algorithms to influence workers?

Below is a mapping of Kellogg et al.'s (2020) six algorithmic control mechanisms onto Edwards' (Field, 1979) framework of direction, evaluation, and discipline, with examples of how each is used within Uber's algorithms.

Example from Uber

Direction	Recommending	Drivers being recommending certain trips to take and when to take a break
	Restricting	Drivers not being able to see full ride details before choosing to accept / decline the trip
Evaluation	Recording	Capture and registration of internal & external data used to understand worker's behaviour
	Rating	Customer ratings & cancellation/acceptance rates for each driver directly influence their employment opportunities (e.g trips shown)
Discipline	Replacing	Drivers can be removed and jobs can easily pass onto other drivers
	Rewarding	Drivers may receive lump-sum payments if certain targets are reached and are incentivised to move to high demand areas with "surge premiums"

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Field, A. J. (1979). Contested Terrain: The Transformation of the Workplace in the Twentieth Century. By Richard Edwards. New York: Basic Books, 1979. Pp. ix + 261. $12.95. The Journal of Economic History, 39(4), 1073–1075. https://doi.org/10.1017/s0022050700099228
Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at Work: the new contested terrain of control. Academy of Management Annals, 14(1), 366–410. https://doi.org/10.5465/annals.2018.0174

Below is an analysis of some of the key dimensions from the FORGOOD framework as they apply to Uber's algorithms and their impact on the workforce.

FOR**GOOD** analysis

FAIRNESS

The algorithmic rating system has been criticised for reinforcing discrimination and widening pay & rating gaps, particularly due to drivers' limited ability to contest unfair evaluations.

OPENNESS

Many drivers report being deactivated with no explanation and that they are unaware of how the decisions they make influence the future opportunities provided to them.

RESPECT

Recommending and restricting trips reduces driver's individual autonomy & the unpredictability of their employment status can harm their wellbeing.

GOALS

One argument is that all 6 R's are used to increase the organisation's profits but this depends on whether it's done at the worker's expense. One could think that driver's preferences are preserved however, they tend to be offered the lowest possible fare.

OPINIONS

OPTIONS

Given Uber's rating process could be seen to increase the stress of drivers, it could be changed to set the maximum rating (calculated objectively by driving time & speed etc) as the default and require additional justification for one- or two-star reviews.

DELEGATION

Algorithmic Transparency

Uber drivers have expressed concerns about the lack of transparency surrounding the algorithms that govern their work. In the existing literature, transparency in this context is described as needing to be both explainable, meaning easy to understand, and accessible, meaning publicly available.

Research on transparency and nudging suggests that, to support free choice and avoid manipulation, individuals should be informed that a nudge is being used and of its intended purpose.

However, transparency alone does not always lead to more ethical outcomes for individuals. It is therefore important to understand when and how algorithmic transparency results in better outcomes for workers, and what forms of transparency are most effective.