

Investigating Transparency and Fairness in Algorithmic Pricing at Uber: Impacts on User Trust, Driver Satisfaction, and Business Performance

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Introduction

Uber sets fares in real time using algorithms that weigh demand, driver availability, distance and traffic. Because this pricing logic is largely hidden from users, both riders and drivers experience it as opaque riders see sudden surge charges with no breakdown, while drivers face inconsistent commission cuts. This opacity risks eroding user trust, destabilizing driver income, and inviting regulatory scrutiny. This study investigates how transparency and fairness in Uber's algorithmic pricing shape user trust, driver satisfaction, and platform performance.

Aim

Analysis of user and driver perceptions of pricing fairness and transparency.

Measure how fare comprehension impacts driver satisfaction and income predictability.

Behavioral patterns of Riders and Drivers

Methods

Research Approach

The study adopts a **pragmatist paradigm**, using "what works" to answer the research questions rather than committing to a single ontological stance.

Pragmatism was chosen because algorithmic fairness is a socio-technical issue due to which it needs statistical patterns from quantitative data and contextual meaning from qualitative insight to be understood fully.

This supports a mixed-methods design that blends numerical measurement with lived experience.

Research Design

Methodology: A parallel convergent mixed-methods design was used, combining quantitative and qualitative strands collected concurrently.

Strategy: The design is explanatory, examining relationships between perceived transparency, fairness (distributive and procedural), trust, and satisfaction among riders and drivers. Quantitative survey data assessed these constructs statistically, while qualitative interviews added depth, together enabling a fuller picture of how pricing transparency affects platform behavior.

Sampling Strategy

Sampling Strategy: “Non-Purposive”
Sample size (n): 50

Participants Configuration

- Drivers: 25** across UK including current or former Uber drivers (full- or part-time.)
- Riders: 25** riders across users having ride history and interaction with Uber at least in age bracket of **>18**.

Common Point: Direct experience or exposure to “Surge Pricing”

Focus of Sample: This targeted approach ensured demographically varied, relevant responses rather than statistical generalizability along.

Data Collection Methods

• **Quantitative Instruments**
Two custom Likert-scale (1–5) questionnaires developed -one for riders, one for drivers
Built from validated theories of fairness, trust, and procedural justice
Deployed via Google Forms linked with Excel

- **Constructs Measured**
 1. Perceived Transparency
 2. Perceived Fairness
 3. Trust
 4. Behavioral Intention

- **Qualitative Supplement**
Face-to-face semi-structured interviews conducted
2 drivers and 2 riders interviewed
Analysed thematically to surface insights numbers alone couldn't capture — around surge pricing, transparency, and financial equity

Results

Riders — Statistical Results

Relationship	Pearson's r	Strength
Transparency → Fairness	0.650	Strong
Transparency → Trust	0.567	Moderately strong
Transparency → Behavioural Intention	0.694	Strongest

Drivers— Statistical Results

Relationship	Pearson's r	Strength
Transparency → Fairness	0.180	Weak
Transparency → Behavioural Intention	0.180	Weak
Transparency → Trust	0.040	Negligible

Discussions

Riders

- **Transparency → Fairness** (r = 0.650, strong): clear fare explanations make riders see prices as justified, not exploitative
- **Transparency → Trust** (r = 0.567, moderate): predictable, well-explained pricing builds confidence in the platform
- **Transparency → Behavioural Intention** (r = 0.694, strongest): transparent pricing drives continued use and recommendation

Drivers

- **Transparency → Fairness** (r = 0.180, weak): clear breakdowns don't make pay feel fairer
- **Transparency → Behavioural Intention** (r = 0.180, weak): clarity barely affects retention decisions
- **Transparency → Trust** (r = 0.040, negligible): explanations don't build driver trust
- **Fairness → Trust** (r = 0.580, strong): fair-feeling compensation builds trust, independent of transparency

Key Takeaways

- Clear pricing drives rider retention, while fair pay guarantees driver loyalty.
- Riders stay for transparent pricing, but drivers stay for fair earnings.
- Price transparency secures rider loyalty, whereas pay fairness secures driver retention.

Balancing these two factors ensures long-term platform stability and user trust. Platform success ultimately relies on transparent fares for riders and fair earnings for drivers.