

# Public Perception of the Gig Economy

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# Problem Background

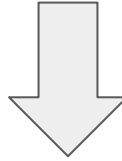
Current ethical problems:

- Algorithmic Reputational Systems
  - Indirect power over workers
  - Homogenization
- Exploitation
  - Weaker social and legal protection ↔ Flexibility
  - Human-as-a-service
  - Low wages
- Regulatory Gaps
  - Employees ↔ Contractors
  - Lack of protection against discrimination

# Problem Statement

“What criteria differentiates the gig economy from the traditional job market?” → Traits

“Which aspects of the gig economy do people like?” → Values



Define the overall structure of the gig economy based on these attributes

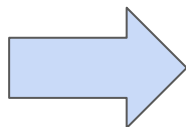
Analyze the public perception of an “ideal gig economy” based on these attributes

# Methodology

## Step 1 (Completed)

Breakdown of Gig Economy

- Trait A
  - Value A
  - Value B
  - .....
- Trait B
  - Value A
  - Value B
  - .....
- Trait C
  - Value A
  - Value B
  - .....
- ...



## Step 2 (Future Implementation)

Which job do you prefer?

Question #1

	Job A <input type="checkbox"/>	Job B <input type="checkbox"/>
Trait A	Value A	Value B
Trait B	Value C	Value B
Trait C	Value D	Value A
Trait D	Value B	Value D

Each trait and each value  
should describe the job environment.

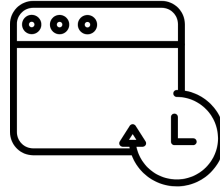
# Traits



## Working hour (time period)

*When to work and when  
to finish?*

- 9am - 6pm
- Totally Flexible



## Working hour (length)

*How long to work per day?*

- 8h
- Minimum 4h
- Work as much as you want



## Salary

*How is your salary  
calculated?*

- Fixed salary
- Base salary + how long you work
- Base: 0 + Variable salary

# Traits (Cont'd)



## Evaluation

*When are you evaluated?*

- Daily
- Monthly
- Yearly



## Days Off

*How to take days off?*

- Paid, but following company's policy
- Unpaid, but on your own will

Uber



## Working Options

*Can you work for other companies in the same sector?*

- Yes
- No



## Supervisor

*Do you have a direct boss/supervisor?*

- Yes
- A machine
- No

# Restrictions

- How to work 9h-5h but not working 8h per day?
- How to work 9h-5h and receive a salary based on how long you work?
- **Some value combinations are impossible.**

**We will control for them in our experimental design and analysis.**

# Sample Size

- Johnson and Orme, 2003
- Rule of Thumb:

$$\frac{N_{participants} \times N_{options} \times N_{vignettes}}{\max(N_{levels})} > 500, 1000$$

$$N_{participants} \geq 75$$

$$N_{options} = 2$$

$$N_{vignettes} = 10$$

$$\max(N_{levels}) = 3$$



# Recruitment

- Social Media & Friends
- If not enough → MTurk!



Reward per assignment	\$0.300
Commission per assignment	\$0.120
Total cost per assignment	\$0.420
Total number of assignments	75
Total cost	\$31.500

# Analysis - AMCE

- Average Marginal Component Effect
  - Hainmueller, J., Hopkins, D., and Yamamoto T. (2014) Causal Inference in Conjoint Analysis: Understanding Multi-Dimensional Choices via Stated Preference Experiments. *Political Analysis* 22(1):1-30
  - Bansak, Kirk, et al. "Using Conjoint Experiments to Analyze Elections: The Essential Role of the Average Marginal Component Effect (AMCE)." Available at SSRN (2020).
- “We show how conjoint analysis, an experimental design yet to be widely applied in political science, enables researchers to estimate the causal effects of multiple treatment components and assess several causal hypotheses simultaneously.”

# IRB Approval?

- We do not need IRB as this is a class project.
- However, we will employ all survey procedures necessary for IRB approval:
  - Consent
  - No unnecessary deceiving → “Imagine ...”
  - Etc...



Research Promotion Team

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# Deadlines

- November 7th → Survey done
- November 21st → Social media & MTurk
- December 1st → Analysis + Preliminary Report