Literature Review

Social desirability: Asking people about potentially aggressive data use is not something they will be honest about. So we used an LLM!!!

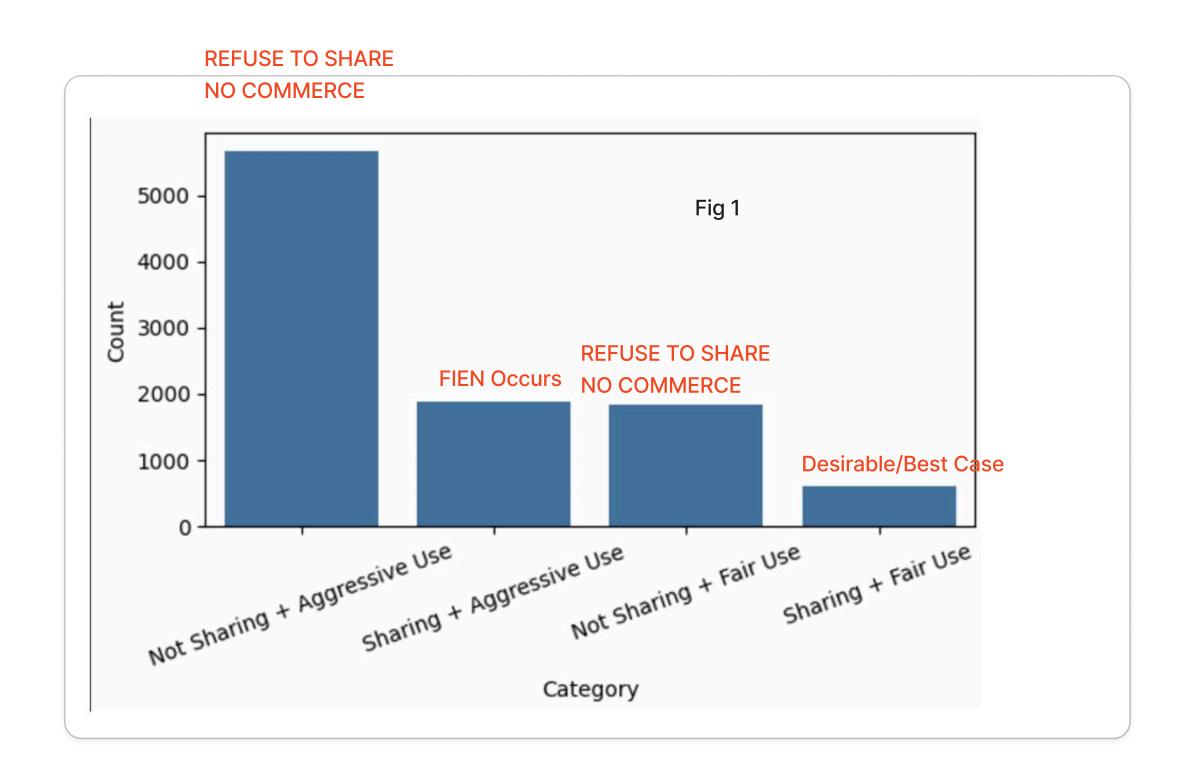
Limitations

Over repeat interactions between company and users

**Boundary Conditions** 

More closely embed LLM reasoning at the individual level

**Future Research** 



Title Forgone Interaction Exploitation Normalization Effect Tendency of a company take an aggressive stance on customer data Y. Dependent Variable Tendency of individual to keep sharing even after exploitation Proportion of people that share X. Independent Variable Potential payoff from taking an aggressive stance Corporation boldness: by how much will corproate aggressiveness grow after sharing rate is greater than a set percent (this captures **Control Variables** opportunistic thinking and boldness because of sharing norms in society) - control variable. Social norms - e.g. sharing rate, when people share less, companies are aggressive to get pay off Moderator Variables when people share, companies are less aggressive (it would appear)

Pay-off maximization - Companies will pick the choice that gives them maximum payoff Exploitative effect - Companies will change their behavior when it gives them a payoff Learning effect - Companies will learn how aggressive to be based on aggregate customer behavior

Research Design/Data

Present n customers with the opportunity to share or not share (based on starting sharing prob) Present 1 company with opportunity to be aggressive or not (based on starting aggressive prob)

Analysis/Reporting

The outcome where people share and are exploited is far more likely than the best case scenario (Fig 1) X times more likely for FIEN effect than judicious use of data (find a good term).

Despite dropping aggression rates when sharing is the norm (guaranteeing steady payoff) companies still swoop in and act exploitatively (POT SHOTS), confirming the FIEN effect.

Future customers learning about past sharing behaviors continue to share even after companies act aggressively

**SOLUTIONS/DETERRENTS** 

**Effects of Deterrents** 

Alpha: Social influence strength. If an individuals decision each time they get to decide to share or not is partially influenced by random choice, but also influenced by the aggregate sharing from the previous round. Alpha represents the strength of the past group sharing rate e.g. 0.3 means you randomly pick whether to share or not (using sharing prob) then you ADD 0.3 x previous group sharing rate.

> Beta: Norm Effect, personal history of sharing... running average of sharing probabilities. Balanes past sharing decisions instead of making each decision fresh or separate from past history.

Reasoning with LLM

We fed the sharing rates and aggression probability to the LLM and received a recommendation and reasoning for the following stage of the interaction.

Then we analyzed the reasoning and decision patterns of the LLM. We checked the reasoning related to the idea of FIEN and POT

So What? Implications

Late aggression (POT SHOTS) despite declining corporate aggression probability CONFIRMS the FIEN effect.

If people can be told accurate sharing rates