

Measuring Lay Reactions to Personal Data Markets

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1. Introduction

The privacy paradox describes empirical results in which people say they value privacy highly but often fail to pay for enhanced privacy when given the opportunity to do so. Recent empirical work suggests that monetary indicators may simply be a poor metric for valuing privacy. This experiment asks a related but orthogonal question: do people accept market transactions and monetary valuations as appropriate mechanisms for personal data allocations?

2. Experiment Design

This study uses a vignette methodology. In the vignette, a successful website owner is approached to sell user data from his website. The study uses a 2 x 3 factorial design.

Relational framing of the data (2 treatments)

- Website is a platform for college alumni networking (non-market framing)
- Website is a platform for buying/selling auto parts (market framing)

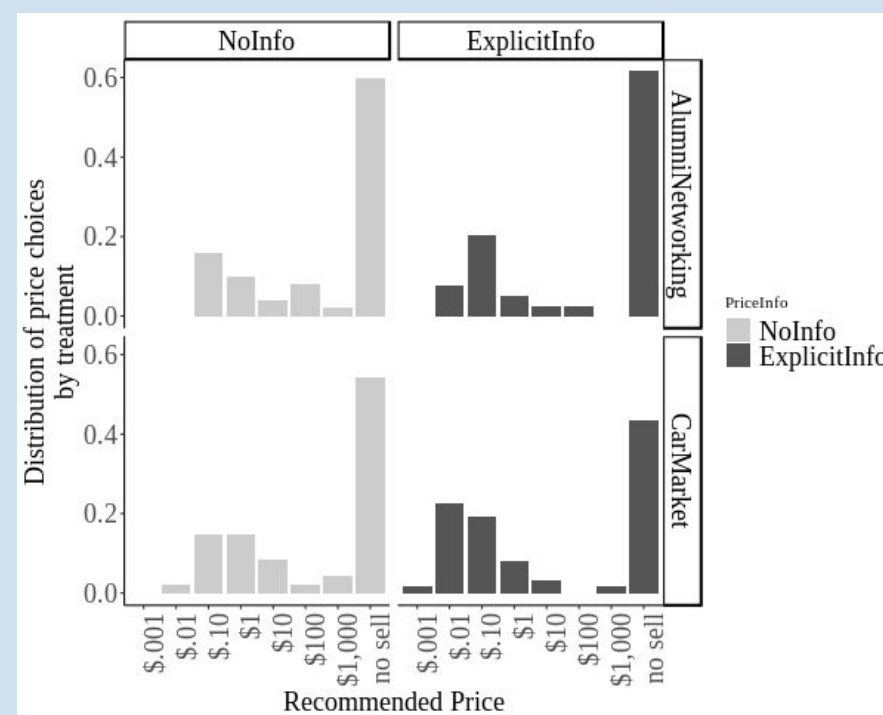
Availability of pricing information (3 treatments)

- No information about market price
- Explicit information (\$.01 per user data point)
- Veiled information (click checkbox to see price information)

Key metrics

- Likert-scale assessments of distress about data sale
- What price to sell data for, or option to refuse to price
- What percentage of proceeds to share with data subjects, or option to refuse

3. Results



Pricing behavior for personal data is distinct from typical market behavior.

- High rates of refusal to price (> 40% in all cases, $p < .01$)
- Median price is an order of magnitude greater than market price ($p < .05$, in 3 of 4 treatments)

Additional results (not pictured)

- Profit-sharing with data subjects does not increase willingness to price data
- People who optionally elect to see the price (veiled treatment) still refuse to price data at high rates

4. Discussion

- Many people reject market paradigm for personal data sales
- Large percentages of lay people reject personal data sales at any price, even with the option to share profits with data subjects
 - It may be that people use data prices as an expressive rather than instrumental metric

Guidance for consumer rights advocates

- Privacy laws not currently in line with cultural norms regarding personal data
- Data labor and personal data property rights may not be straightforward to implement if perceived as imposing market logic

5. Conclusion

- Many people refuse a market sales paradigm for personal data
- Results support legal reform away from market paradigm
- Minimal legal compliance is not adequate for fair AI

Key References

1. Davis, KE. Marotta-Wurgler, F. 2019. Contracting for Personal Data. 94(4) New York University Law Review 663.
2. Lee, Y. and Weber, R. 2018. Revealed Privacy Preferences: Are Privacy Choices Rational? Working paper available at https://drive.google.com/file/d/1fWr8duoLinU6YIVY69_6BRBIfQwg80xa/view. Last accessed May 1 2020.
3. McGraw, A.P. and Tetlock, P.E. 2005. Taboff Trade-Offs, Relational Framing, and the Acceptability of Exchanges. Journal of Consumer Psychology 15(1), 2-15.
4. Winegar, A.G. and Sunstein, C.R. 2019. How Much Is Data Privacy Worth? A Preliminary Investigation. 42 Journal of Consumer Policy 425-440.
5. Zuboff, S. 2019. The Age of Surveillance Capitalism. Public Affairs.