Research and Data for Regulation of Digital Markets

DMA AND BEYOND CONFERENCE FEBRUARY 2025

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A taxonomy of digital platform research, with examples

	Experimental	Observational
With platform	 2020 Facebook and Instagram Election Study Ad load (Meta: Brynjolffson et al., Pandora: Goli et al.) Ad effectiveness (eBay: Blake, Nosko, and Tadelis; Meta: Wernerfelt et al.) Uber price elasticities (Angrist, Caldwell, and Hall; Christensen and Osman) 	 Click-and-query data (Allcott, Castillo, Gentzkow, Musolff, and Salz) Effects of ATT (Deisenroth et al.) Seller reputation (Nosko and Tadelis) Uber surge elasticities (Castillo)
Independent	 Pay people to reduce social media use (e.g., Allcott, Gentzkow, and Song) or switch to Bing (ACGMS) Randomize ad blocking (ACGMS, Chreyre et al.) Change news feed (Levy) Re-order search results (ACGMS, Farronato, Fradkin, MacKay) Test for racial discrimination (Edelman, Luca, and Svirsky; Ge et al.) 	 Scrape Amazon search results (Yu) Use public data released by platform (Amazon pricing API, CrowdTangle, Meta Political Ad Library, Google Trends)

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Example 1: The Welfare Effects of Social Media

1. Recruit with Facebook ads

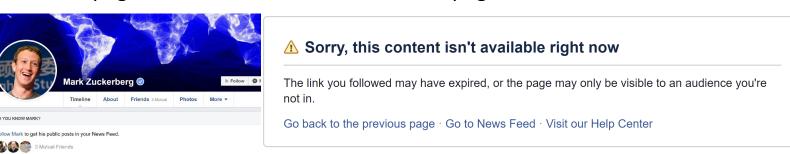


3. Automatically check if participants are deactivated or not

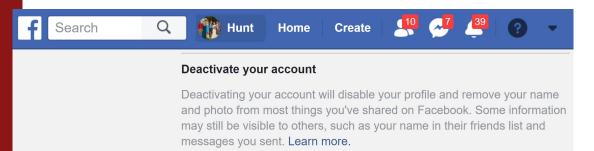
Homepage if active:

This Giving Tuesday, people on Facebook raised more than \$100 million for

causes they care about. Thanks everyone for giving back

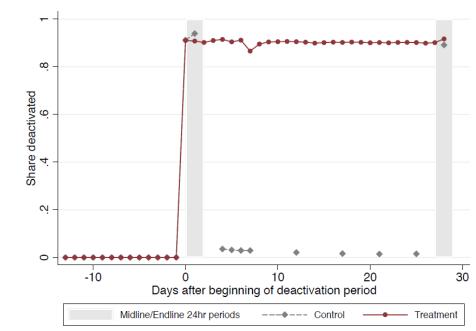


2. Pay people to deactivate



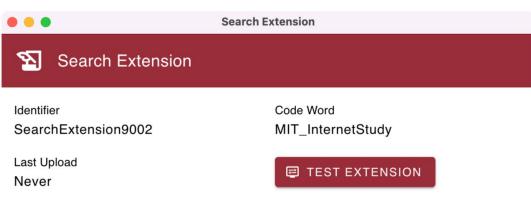
4. Measure effects

Homepage if deactivated:



Example 2: monitoring apps and browser extensions for research

 WebMunk (Farronato and Fradkin) and Search Extension (Allcott, Castillo, Gentzkow, Musolff, and Salz)

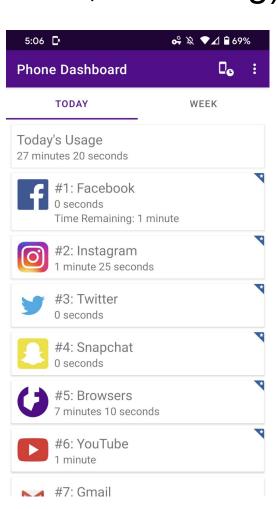


The MIT Search Engine Study will pay you \$10 if you keep this extension installed for at least two months after taking our initial survey and if you fill in our second survey.

Our browser extension records when and how often you search on any web search engine (google.com, bing.com, etc.), for all searches including up to 20 days before installation. It also records whether the search was conducted via the address bar or new tab page, whether you clicked on a search result, and, if so, the rank of the result. It does not record anything else. In particular, it never records your search terms or the links you click on.

We will store the recorded information on our secure servers and will only share the fully anonymized data.

 Phone Dashboard (Allcott, Gentzkow, and Song)



Example 3: scraped data

Musolff (2024), Yu (2024), Moshes and Moshes, etc.



Congestion Pricing Tracker

Curious whether Congestion Pricing is having an impact on commutes in NYC?

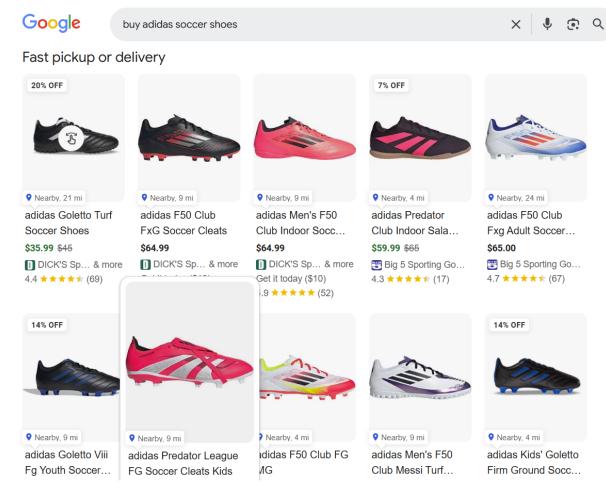
Take a look below to compare traffic data before and after Congestion Pricing begins on January 5th, 2025.

Enable Color Blind Mode

Enable Dark Mode

Commute Times for Route 7: Holland Tunnel (Affected)

on Wednesdays
on Wednesday



Example 4: third party data

similarweb

#1 Traffic Checker for Comparing Website Traffic

Compare your website's performance against your competitors' — from traffic sources to keywords — to find your best growth opportunities.



statcounter

GlobalStats

JungleScout

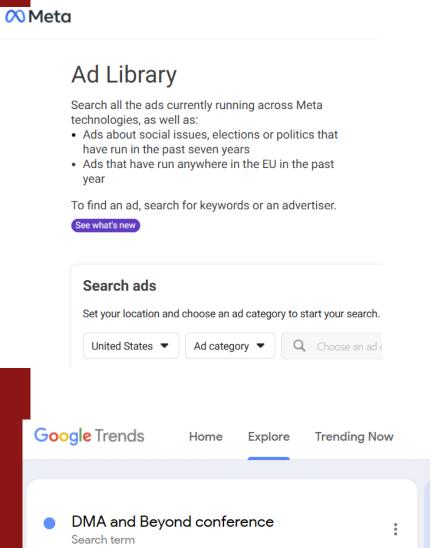
Amazon intelligence, simplified

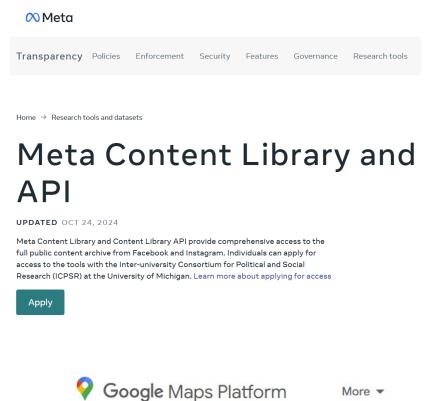
As a trusted data partner, we help sellers, brand owners, and enterprises uncover market dynamics, build stronger data models, and capitalize on opportunities. Our cutting-edge Competitive Intelligence tool is the only solution for Amazon businesses to benchmark their brand, understand how competitors are taking market share, and fuel the strategy to win it back.

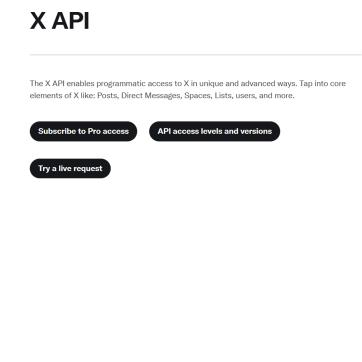
2. Could platforms make observational data more easily available?

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Examples of platform data sharing







Language *

Get Started

Contact Sales

Build awesome apps with Google's knowledge of the real world

More *

Q Search

3. There are both opportunities and challenges in running experiments with platforms

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Example: why experiments with platforms are valuable

Benefits of 2020 Facebook-Instagram Election Study collaboration with Meta, compared to earlier independent study (ABEG 2020)

- 1. Scale
- 2. Some internal data
- 3. Run experiments that can't be done independently: change algorithm, ad load, etc.

Three keys to designing collaborations with platforms

- 1. Pre-analysis plan
- 2. Grant control rights to independent academic authors
- 3. Clear expectations about roles and timeline

Challenge: what experiments will get run?

- Not clear how a regulator could mandate experiments
 - Who would participate?
 - True buy-in is important: resources for internal analyses, systems, and privacy approvals
- Thus, a selected set of experiments will be run

Conclusion

Takeaways

- Important research is possible without collaboration from platforms
- 2. Could platforms make observational data more easily available?
- 3. There are both opportunities and challenges in running experiments with platforms