Rebuttal Testimony of Dr. Tasneem Chipty

U.S., et al. v. Google LLC

United States District Court for the District of Columbia

May 9th, 2025

Ex. No.
PXRD030
1:20-cv-03010-APM
1:20-cv-03715-APM

No Basis that Dr. Chipty's "Remedial" World Would Lead to a "Competitive" World that Approximates the But-For World

?

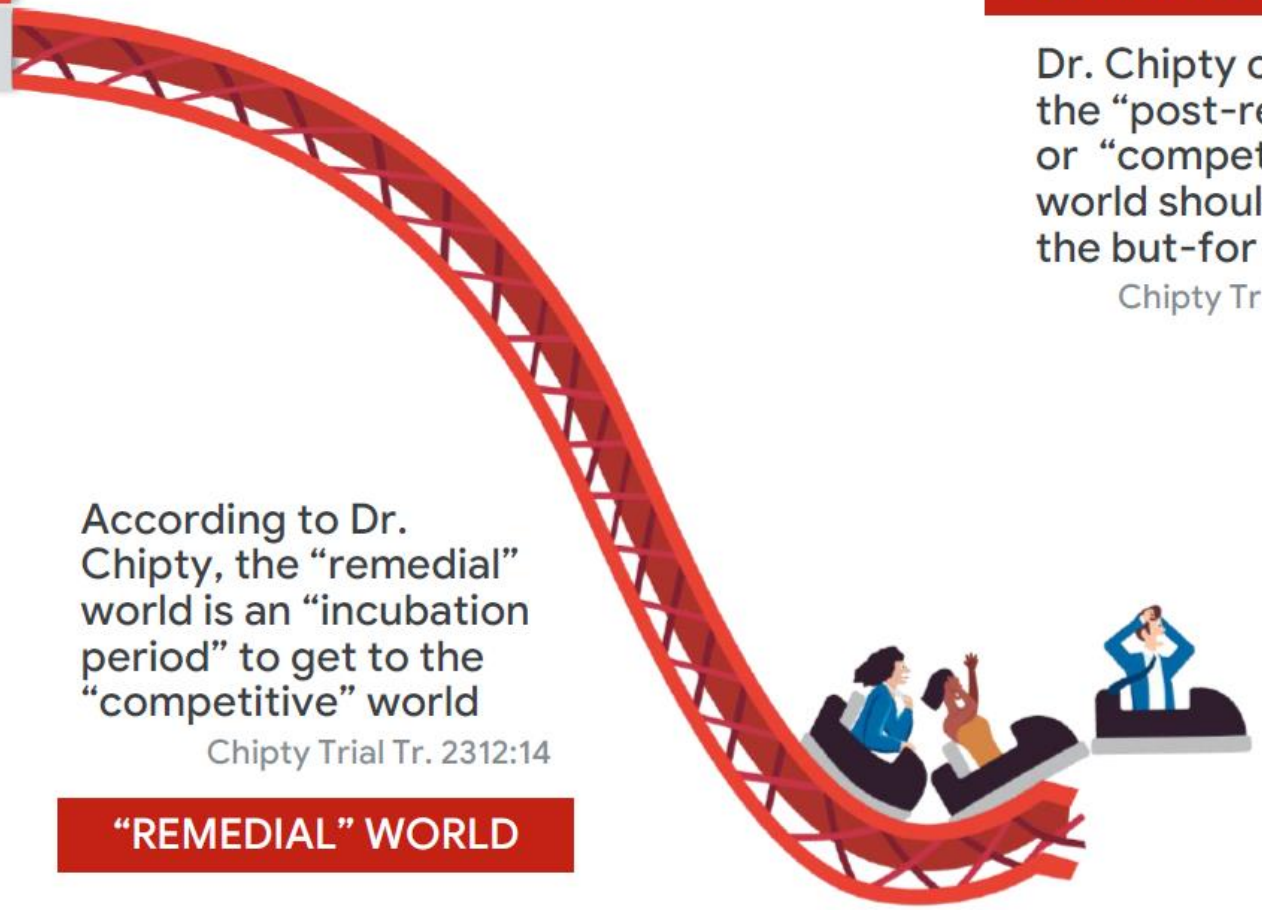
BUT-FOR WORLD

ACTUAL WORLD

"COMPETITIVE" WORLD

Dr. Chipty claims that the "post-remedial" or "competitive" world should reflect the but-for world

Chipty Trial Tr. 2313:1-5



According to Dr. Chipty, the "remedial" world is an "incubation period" to get to the "competitive" world

Chipty Trial Tr. 2312:14

"REMEDIAL" WORLD

Google

RDXD-33.008

Slide 8, Demonstrative Deck of Dr. Murphy

No Evidence of "Lingering Effects" from Raised Entry or Expansion Barriers

- Claimed "exacerbation" of brand, scale, and capital cost barriers all flow from rivals' lower scale (fewer queries) in but-for world
- Dr. Chipty assumes rather than shows any material impact on rivals' scale
- Corrective remedies directly address distribution barrier

Dr. Tasneem Chipty

1.	Distribution	Addressed
2.	Scale	Not materially exacerbated
3.	Brand	Not materially exacerbated
4.	Capital Costs	Not materially harder to overcome

PXRD012 Slide 10 (adapted)

Google

RDXD-33.014

Slide 14, Demonstrative Deck of Dr. Murphy

The Effects of Google's Conduct on Barriers

Distribution	"Google's distribution agreements foreclose a substantial portion of the general search services market and impair rivals' opportunities to compete." *Mem. Op. at 226.* "Google's rivals must distribute their GSEs through less efficient, non-default access points, which results in fewer users and fewer ad dollars spent to target those users." *Mem. Op. at 264.*
Scale	"Google's distribution agreements have constrained the query volumes of its rivals, thereby inoculating Google against any genuine competitive threat." *Mem. Op. at 234.* "[D]eny rivals access to user queries, or scale, needed to effectively compete." *Mem. Op. at 226.*
Brand	Derivative of scale and distribution.
Capital Costs	"The distribution agreements have caused a third key anticompetitive effect: They have reduced the incentive to invest and innovate in search." *Mem. Op. at 236.* "The foreclosure of efficient channels of distribution has contributed significantly to the lack of new investment." *Mem. Op. at 237.*

Types of Antitrust Remedies

Corrective Remedies

- Prohibit the type of conduct found anticompetitive
- Restore competition through the competitive process
- Give rivals greater opportunity based on their competitive merits
- Can sufficiently restore competition without measuring harm from conduct

Restorative Remedies

- Alter market outcomes by interfering with the competitive process
- Warranted only to the extent conduct distorted market outcomes
- Requires determining the extent of distorted market outcomes

Regulatory Interventions

- Engineer alternative market outcomes rather than remedy the competitive process
- Attempt to remove inherent entry barriers
- Replace the competitive process with regulatory mandates

Google
RDXD-33.006

Slide 6, Demonstrative Deck of Dr. Murphy

Prof. Murphy's Corrective Remedies: Last Bullet

Prof. Kevin Murphy
Professor of Economics,
University of Chicago

Q. Can you tell the Court what you meant by that final bullet under "**Corrective remedies** can sufficiently restore competition without measuring harm from conduct"?

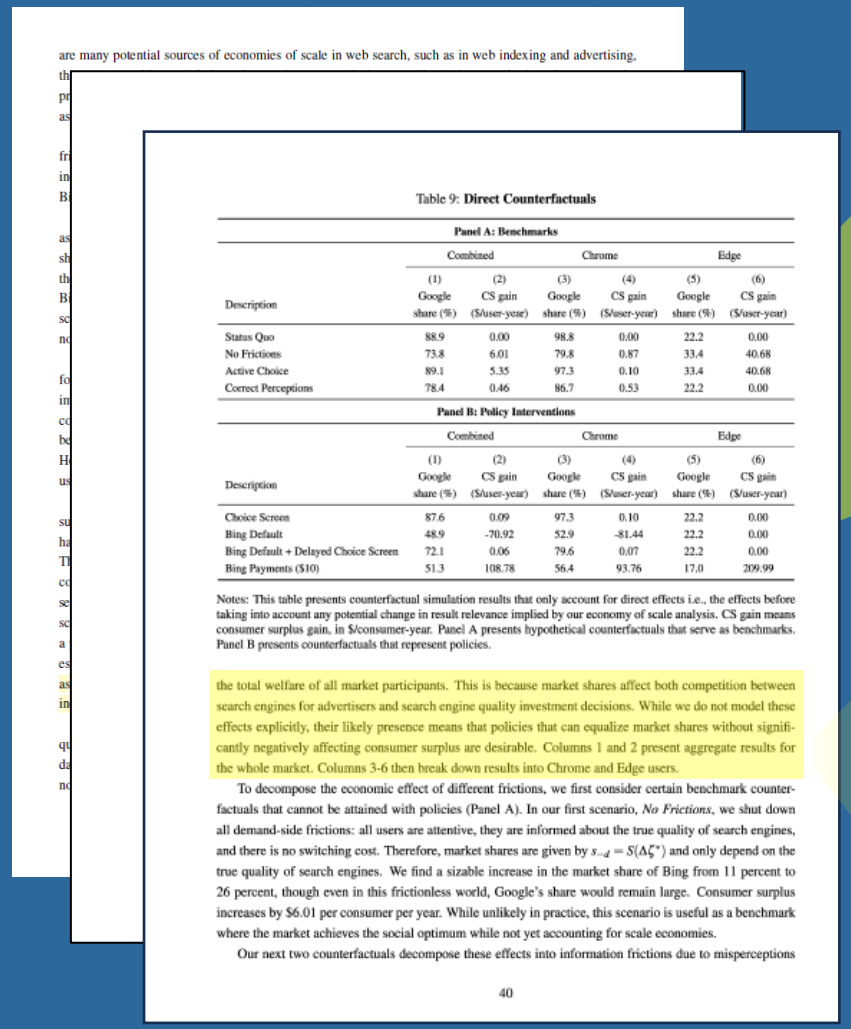
A. Yeah, it's basically the idea I just said. We don't have to say, you know, this is going to have a huge effect or **the effect going forward is going to be the same as the effect we see in the past**. . . .

Trial Testimony

Remedy Tr. 4204:8–20 (emphasis added).

Allcott Paper: The $70 Does Not Reflect Benefits to Competition

2025



are many potential sources of economies of scale in web search, such as in web indexing and advertising,

Table 9: **Direct Counterfactuals**

Panel A: Benchmarks

	Combined		Chrome		Edge	
Description	(1) Google share (%)	(2) CS gain ($/user-year)	(3) Google share (%)	(4) CS gain ($/user-year)	(5) Google share (%)	(6) CS gain ($/user-year)
Status Quo	88.9	0.00	98.8	0.00	22.2	0.00
No Frictions	73.8	6.01	79.8	0.87	33.4	40.68
Active Choice	89.1	5.35	97.3	0.10	33.4	40.68
Correct Perceptions	78.4	0.46	86.7	0.53	22.2	0.00

Panel B: Policy Interventions

	Combined		Chrome		Edge	
Description	(1) Google share (%)	(2) CS gain ($/user-year)	(3) Google share (%)	(4) CS gain ($/user-year)	(5) Google share (%)	(6) CS gain ($/user-year)
Choice Screen	87.6	0.09	97.3	0.10	22.2	0.00
Bing Default	48.9	-70.92	52.9	-81.44	22.2	0.00
Bing Default + Delayed Choice Screen	72.1	0.06	79.6	0.07	22.2	0.00
Bing Payments ($10)	51.3	108.78	56.4	93.76	17.0	209.99

Notes: This table presents counterfactual simulation results that only account for direct effects i.e., the effects before taking into account any potential change in result relevance implied by our economy of scale analysis. CS gain means consumer surplus gain, in $/consumer-year. Panel A presents hypothetical counterfactuals that serve as benchmarks. Panel B presents counterfactuals that represent policies.

the total welfare of all market participants. This is because market shares affect both competition between search engines for advertisers and search engine quality investment decisions. While we do not model these effects explicitly, their likely presence means that policies that can equalize market shares without significantly negatively affecting consumer surplus are desirable. Columns 1 and 2 present aggregate results for the whole market. Columns 3-6 then break down results into Chrome and Edge users.

To decompose the economic effect of different frictions, we first consider certain benchmark counterfactuals that cannot be attained with policies (Panel A). In our first scenario, *No Frictions*, we shut down all demand-side frictions: all users are attentive, they are informed about the true quality of search engines, and there is no switching cost. Therefore, market shares are given by $s_{-d} = S(\Delta\xi^*)$ and only depend on the true quality of search engines. We find a sizable increase in the market share of Bing from 11 percent to 26 percent, though even in this frictionless world, Google's share would remain large. Consumer surplus increases by $6.01 per consumer per year. While unlikely in practice, this scenario is useful as a benchmark where the market achieves the social optimum while not yet accounting for scale economies.

Our next two counterfactuals decompose these effects into information frictions due to misperceptions

40

We understand **market shares [are]** . . . an **important proxy for the total welfare** . . . .

[W]e do not model these effects explicitly . . . .

[T]he **(un-modeled) potential benefits** from a less concentrated market[] [include] increased investment incentives and fewer harms on the advertising side.

Hunt Allcott et al., *"Sources of Market Power in Web Search: Evidence From a Field Experiment"*, 5, 39–40 (2025), available at https://www.nber.org/papers/w33410 (emphasis added).

GenAI Competitors Include the Following . . .

Company	Chatbot	Leading Foundation Models
OpenAI	ChatGPT	GPT family (e.g., GPT-4o) OpenAI o1, o3
Anthropic	Claude	Sonnet, Haiku, and Opus models
xAI	Grok	Grok models
Perplexity	Perplexity answer engine	Uses other companies' FMs
Meta	MetaAI	Llama models
DeepSeek	DeepSeek	R1
Microsoft	Copilot	Principally uses OpenAI models (developing Phi and MAI)
Google	Gemini app	Gemini

Hitt Opening Rpt. §§ V.C.1-2, V.D.1-2; Hitt Opening Rpt., Ex. 15

Google
RDXD-32.020

Slide 20, Demonstrative Deck of Dr. Hitt

An Ad-Side Remedy Inflicts Harm Without Benefits

Competition between GSEs for *advertisers* occurs via competition between GSEs for *queries*

- Once queries go to different GSEs, ad dollars follow
- User-side remedies address this competition for queries
- Hence, ad-side remedies do not enhance competition, but rather:
  - Reduce investment incentives
  - Generate significant legal and enforcement costs
  - Short-circuit competitive process in advertising and syndication markets
  - Undermine Google's ability to protect users and advertisers
  - Jeopardize privacy

Google
RDXD-27.005

Slide 5, Demonstrative Deck of Dr. Israel

Dr. Israel's Testimony: Ad Quality Does Not Influence Competition for Queries

Dr. Mark Israel
Econic Partners
Formerly Compass Lexecon

THE COURT: Do you discount the possibility that ad quality, which is specific to providers, to general search engines can influence the competition for queries?

A. [T]here's not a lot of evidence that ad quality is really driving things.

Trial Testimony

Creating High-Quality Search Ads Starts with User Query Data

2024

Google

Search Ads/AI

Vidhya Review

September 10, 2025

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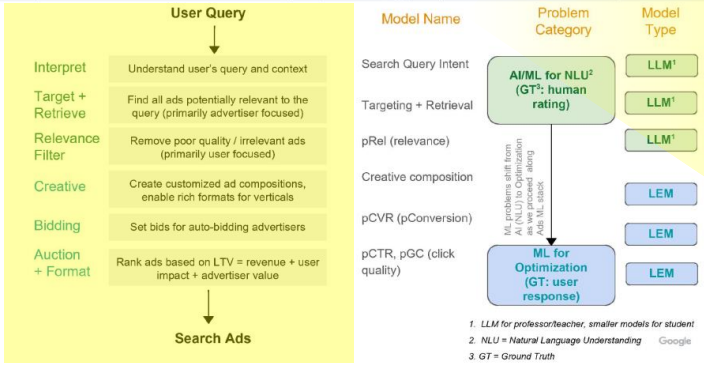
Simplified Ads ML stack: LLM mainly impacts early part, LEM dominates late part



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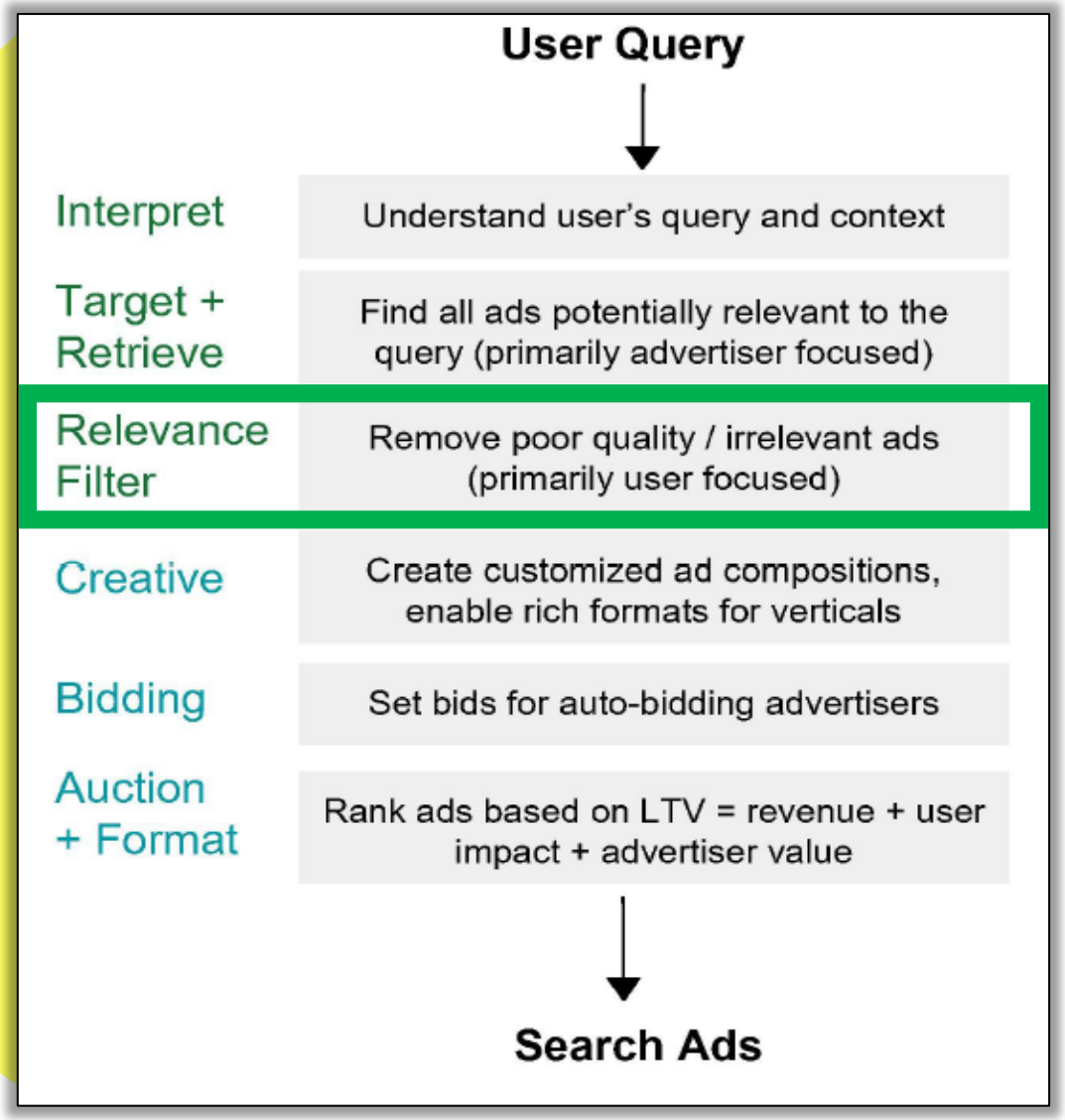
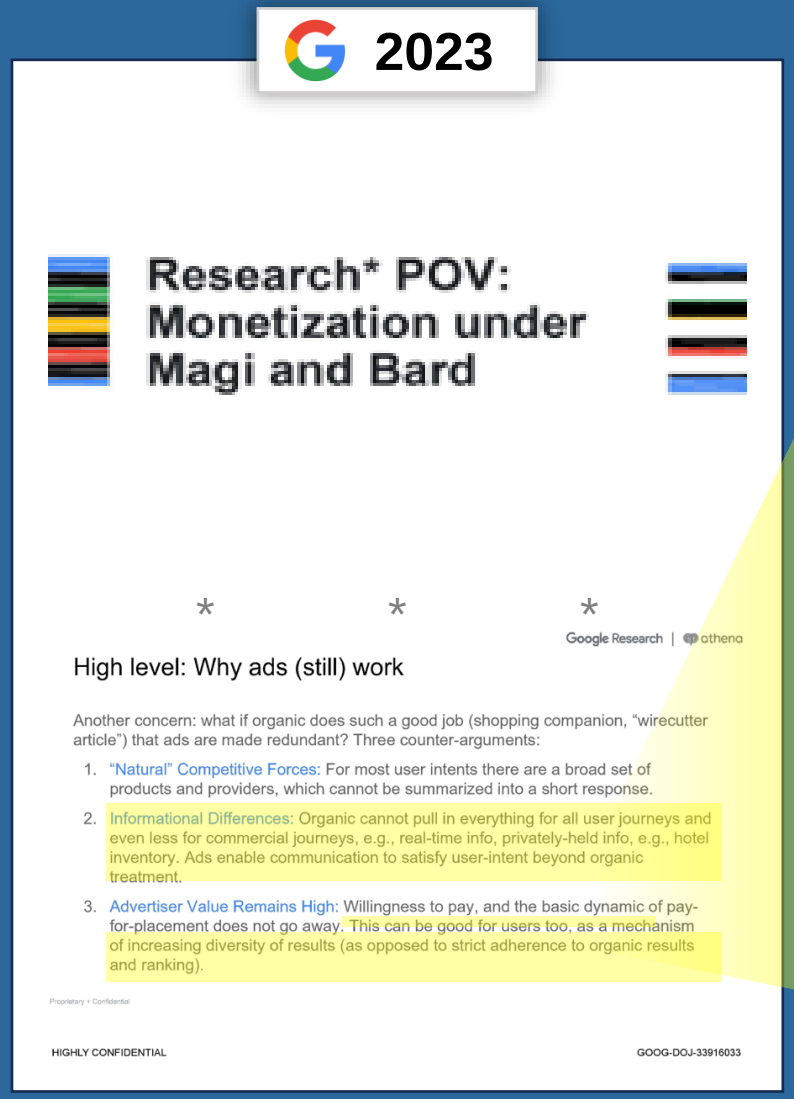


High-Quality Ads Improve Rivals' Ability to Compete for Queries

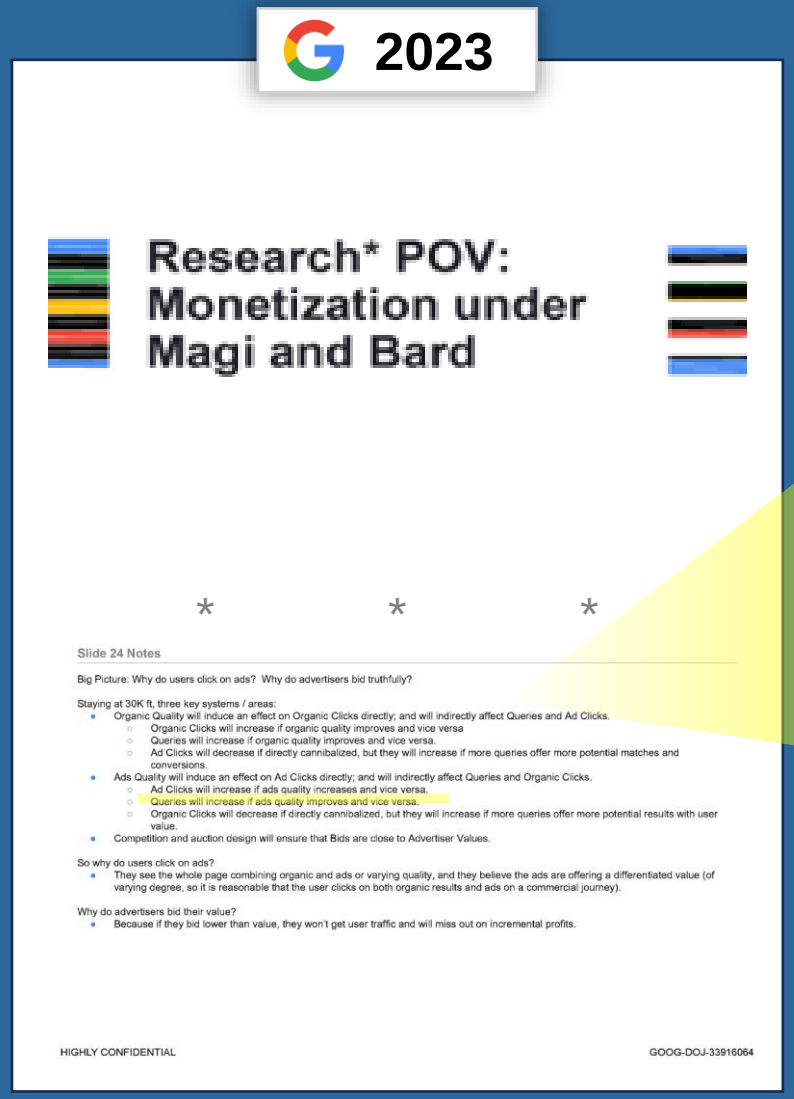


2. **Informational Differences:** **Organic cannot pull in everything for all user journeys and even less for commercial journeys,** e.g., real-time info, privately-held info, e.g., hotel inventory. **Ads enable communication to satisfy user-intent beyond organic treatment.**

3. **Advertiser Value Remains High:** Willingness to pay, and the basic dynamic of pay-for-placement does not go away. **This can be good for users too, as a mechanism of increasing diversity of results (as opposed to strict adherence to organic results and ranking).**

PXR0240 at 033 (emphasis added).

High-Quality Ads Improve Rivals' Ability to Compete for Queries



2023

Research* POV: Monetization under Magi and Bard

* * *

Slide 24 Notes

Big Picture: Why do users click on ads? Why do advertisers bid truthfully?

Staying at 30K ft, three key systems / areas:

- Organic Quality will induce an effect on Organic Clicks directly; and will indirectly affect Queries and Ad Clicks.
  - Organic Clicks will increase if organic quality improves and vice versa
  - Queries will increase if organic quality improves and vice versa.
  - Ad Clicks will decrease if directly cannibalized, but they will increase if more queries offer more potential matches and conversions.
- Ads Quality will induce an effect on Ad Clicks directly; and will indirectly affect Queries and Organic Clicks.
  - Ad Clicks will increase if ads quality increases and vice versa.
  - Queries will increase if ads quality improves and vice versa.
  - Organic Clicks will decrease if directly cannibalized, but they will increase if more queries offer more potential results with user value.
- Competition and auction design will ensure that Bids are close to Advertiser Values.

So why do users click on ads?

- They see the whole page combining organic and ads or varying quality, and they believe the ads are offering a differentiated value (of varying degree, so it is reasonable that the user clicks on both organic results and ads on a commercial journey).

Why do advertisers bid their value?

- Because if they bid lower than value, they won't get user traffic and will miss out on incremental profits.

HIGHLY CONFIDENTIAL GOOG-DOJ-33916064

- Queries will increase if ads quality improves and vice versa.

High-Quality Ads Improve Rivals' Ability to Compete for Queries

Gabriel Weinberg
CEO & Founder of DDG

A. **[Ads] need to be as relevant as other search modules**…In fact, we were talking about the **rage quit queries**, earlier, like if people are trying to navigate and you put in a bunch of ads, that's exactly the type of query that people get very angry about.

* * *

A. . . . **When ads are showing when they are not supposed to be showing it's a very bad user experience.** So, you know, we still get a lot of complaints about that today. And **it's for these long-tail queries where we are generally showing ads when we shouldn't be**.

Trial Testimony

Remedy Tr. 845:23–848:21 (emphasis added).

General Search Firms Compete for Advertisers

	Court's Finding	Dr. Israel's Opinion
1	General search text advertising is a well-defined market.	Each query would represent its own monopoly market.
2	Google's conduct harmed competition in general search text advertising: higher ad prices, lower ad quality.	There could be no harm to competition because there was no competition.

Chipty Rebuttal Report, § VIII

See also RDXD-37.005.