

OPTIMIZING BRAND VISIBILITY IN GENERATIVE AI SEARCH

Group 8 | Marketing Analytics | Università Bocconi

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STRATEGIC INDUSTRY CHOICE

Selected Industry: Password manager

1) Purchase decisions driven by price, trust and security, not impulse. Users adopt password managers only after careful evaluation, making LLM recommendations highly influential.

2) Seven major global players: 1Password, Bitwarden, LastPass, Dashlane, Keeper, NordPass and RoboForm.

CLEAR USER INTENT

Market organized around well-defined query types across three core topics:

- **Price:** "cheap," "free," "affordable"
- **Security:** "zero-knowledge," "encryption," "privacy"
- **Fit/Use:** "for families," "for teams," "for Mac"





RESEARCH QUESTION

WHICH DRIVERS INCREASE THE PROBABILITY OF BEING SUGGESTED BY CHATGPT OR GEMINI?

We treat ChatGPT and Gemini as "gatekeepers" that either include or exclude brands when responding to consumer queries. Our structured approach quantifies which marketing signals most strongly associate with LLM recommendations.





RESEARCH DESIGN



1

Dataset Construction

840 observations: 60 unique queries × 2 LLMs × 7 brands

2

Query Design

20 queries per topic (Price, Security, Fit/Use) in natural consumer language

3

Automated Collection

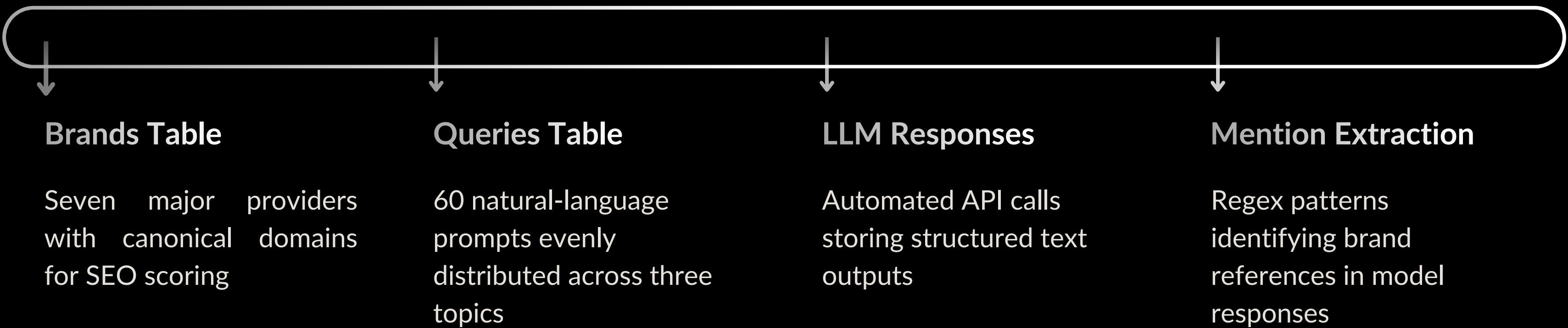
Python API pipeline for ChatGPT (gpt-5-mini) and Gemini (gemini-2.5-flash)

4

Feature Engineering

Brand-level metadata, topic-brand fit measures, and social signals

DATA COLLECTION PIPELINE





MEASURING BRAND VISIBILITY

Brand-Level Attributes

- Trustpilot ratings & reviews
- G2 ratings & reviews
- Lighthouse SEO scores (0-100)

Brand Messaging Guidelines

- Listicle mentions
- Reddit discussions
- YouTube videos
- LinkedIn content
- Domain topic pages

Agile Marketing Approach

- **Social Buzz:** Reddit + YouTube + LinkedIn
- **Articles:** Listicles + blogs
- **Review Index:** Rating × Volume



KEY EXCLUSIONS

OUR FOCUS: MEASURING MARKETING EFFORT, NOT EXPERIMENTAL TECHNICAL FEATURES

1

Wikipedia Dummy

Every brand has a Wikipedia page-no variation to measure. While Wikipedia is important training data, having a page is a baseline requirement in this industry.

2

Ilms.txt File

Only Bitwarden implements this AI-readable file, creating perfect multicollinearity with the brand itself. Worth noting: Bitwarden was mentioned 100% of the time.



THE MODEL

Conditional Logistic Regression (Fixed Effects Logit)

Dependent Variable

Binary mention (1 if brand referenced, 0 otherwise)

Independent Variables

Social Buzz, Articles/PR, SEO Score, Review Index, Source (ChatGPT vs Gemini)

Controls

Query fixed effects with clustered standard errors



REGRESSION RESULTS

Drivers	Odds Ratio	Significance	Interpretation
Social Buzz	10.99	*** (p<0.001)	Dominant driver. High buzz = massive visibility
Articles/PR	1.86	*** (p<0.001)	Being in "Top 10" lists nearly doubles mention odds
SEO Score	1.43	** (p<0.05)	Significant, but weak compared to social signals
Reviews	0.73	n.s.(p=0.125)	Premium support and consulting included
Gemini (Source)	0.41	*** (p<0.001)	Gemini is significantly "stingier" than ChatGPT

*** p<0.001, ** p<0.05

PLATFORM DIFFERENCES

1

ChatGPT: The Generous Recommender

Lists multiple acceptable options for the same query. Broader, more inclusive approach to brand mentions.

2

Gemini: The Strict Gatekeeper

~60% less likely to mention brands. Requires products to be indisputable market leaders. Acts as a curated shortlist.



THE POWER OF SOCIAL BUZZ



Odds Ratio

11x

Strongest predictor in
the model

Marginal Effect

+26.3%

Increase in mention
probability per
standard deviation

Channels Combined

3

Reddit, YouTube,
LinkedIn aggregated

LLMs place greater weight on dynamic, community-generated sources than static content. In password managers, where trust is validated through user communities, AI reproduces this collective judgment.

WHAT DOESN'T MATTER: REVIEWS

THE REVIEW INDEX IS NOT STATISTICALLY SIGNIFICANT IN OUR MODEL. ALL SEVEN BRANDS ALREADY ENJOY VERY HIGH RATINGS (4.5+).

Within such a compressed range, small differences (e.g., 4.8 vs. 4.6) don't meaningfully influence LLM citation behavior

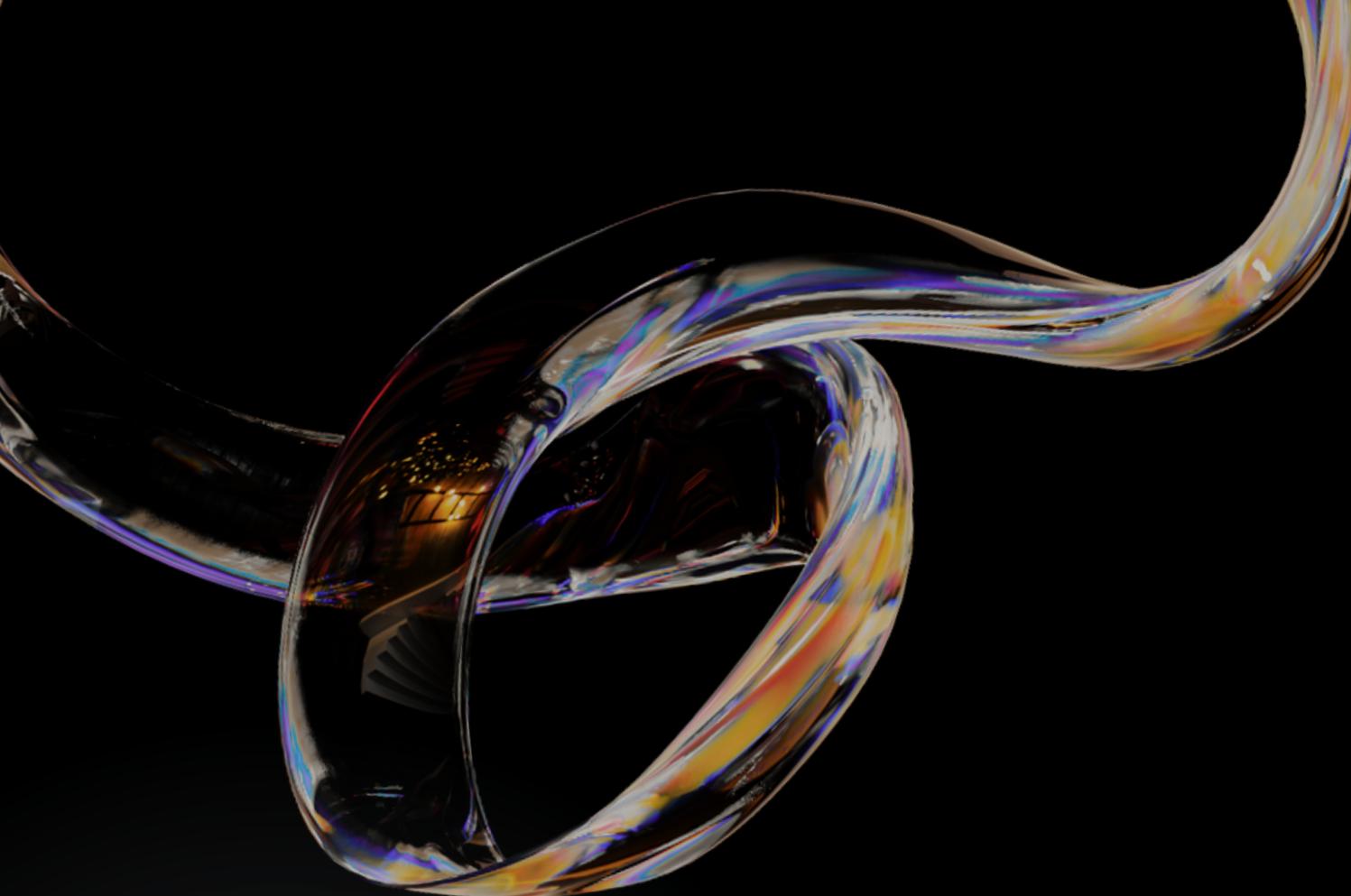
Baseline Requirement

Strong reviews are necessary to be considered at all

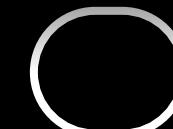
Not a Differentiator

Once the threshold is met, review scores don't help brands stand out



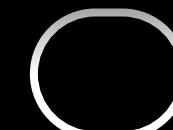


MANAGERIAL IMPLICATIONS



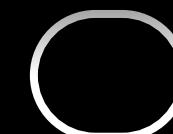
Prioritize Community Engagement

Rebalance budgets toward fostering genuine discussion on Reddit, YouTube, and LinkedIn. Product deep-dives and technical threads drive visibility more than incremental SEO gains.



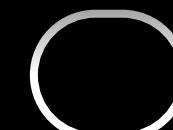
Maintain PR & Content

Secure inclusion in "Best X" rankings and maintain topical blog presence. Articles/PR nearly doubles citation odds but works best combined with active social discussion.



Monitor Review Quality

Maintain high ratings as a minimum threshold, but marginal investments in moving from 4.6 to 4.8 won't significantly affect AI visibility.



Stage Platform Strategy

First win share of voice on ChatGPT through Social Buzz and Articles. Then treat Gemini as a second-stage objective requiring category-leading coverage.

LIMITATIONS



Proxy Measures

Google search operators capture indexed pages but not sentiment, depth, or recency of conversations.

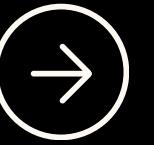
Channel Aggregation

Social Buzz combines Reddit, YouTube, and LinkedIn, concealing channel-specific effects for model stability.

Bitwarden Anomaly

Open source + only llms.txt file + 100% mention rate. Cannot disentangle community popularity from technical readiness.





FUTURE RESEARCH

- ✖ Replace proxies with native platform data and sentiment analysis
- ✖ Model channel-level effects across multiple industries
- ✖ Experimental design tracking llms.txt deployment impact





KEY TAKEAWAY

COMMUNITY SIGNALS DRIVE AI VISIBILITY

In the age of generative AI search, brands must shift from traditional SEO to fostering authentic conversations in digital communities. Social Buzz is 7.7x more powerful than SEO scores in securing LLM mentions.

The future of brand visibility lies in where people talk, not just where search engines crawl.



THANK YOU

for your time and attention

