



# Google's Information is Power

## *Info-opoly Power*

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\* The views expressed in this presentation are the author's; see Scott Cleland's full biography at: [www.ScottCleland.com](http://www.ScottCleland.com)

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# Summary of Google Info-opoly Conclusions

1. Google's unmatched hoard of the "world's accessible digital information" makes it a consumer info-opoly.
2. Google's info-opoly is enduring given overwhelming barriers to competition.
3. Google effectively has admitted to predatory pricing and anticompetitive monopoly cross-subsidization.
4. Google has a pattern of dictating a predatory wholesale price of zero for info providers' info.
5. Structurally, Google can be divided into three key parts for antitrust purposes: information, information-access, and advertising.

# Summary Outline

## **I. Google's Info-opoly**

- A. Market Definition
- B. In Google's own words
- C. By the numbers
- D. Google's consumer info-opoly
- E. Why Google's info-opoly is enduring (three slides)

## **II. Additional Conclusions**

- A. Google admits to predatory pricing & cross subsidization
- B. Google's predatory wholesale info pricing (four slides)
- C. Structurally, Google's info-opoly has three key parts

# Proposed Market Definition:

Consumer market for the “world’s accessible digital information”

- Google’s info-opoly is **the single source of demand for, and supply of, the world’s accessible digital information.**
  - Google knows the Internet makes information universally *available*, but info has little value if it is not *accessible* and useful.
- The **proposed market definition -- the “world’s accessible digital information”** -- is vastly more info than Google’s crawled search index.
- Google is the world’s consumer information **gatekeeper**; i.e. the:
  - **Monopsony wholesale “buyer”** of info seeking global demand; &
  - **Monopoly retail “seller”** via ads of info seeking global demand.

# Google's "Information is Power" -- In It's Own Words

***"Google's mission is to organize the world's information and make it universally accessible and useful."***

- ***"The Internet makes information available; Google makes it accessible."***
  - Google Chief Economist Hal Varian [11-3-09](#)
- ***"Scale is the key. We just have so much scale in terms of the data we can bring to bear."***
  - Google Chairman Eric Schmidt [Bloomberg 10-09](#).
- ***"We don't have better algorithms than everyone else; we just have more data."***
  - Google's Chief Scientist Peter Norvig [ECPM Blog 3-10](#)
- ***"Never delete anything, always use data – it's what Google does."***
  - Google Cloud Platform Director Tom Kershaw, [NYT 3-15](#)
- ***"Our model is just better...Based on that, we should have 100% share"***
  - Google CEO Eric Schmidt [Forbes 12-09](#)

# Google's Unmatched Multiple Unique Corpora of Info

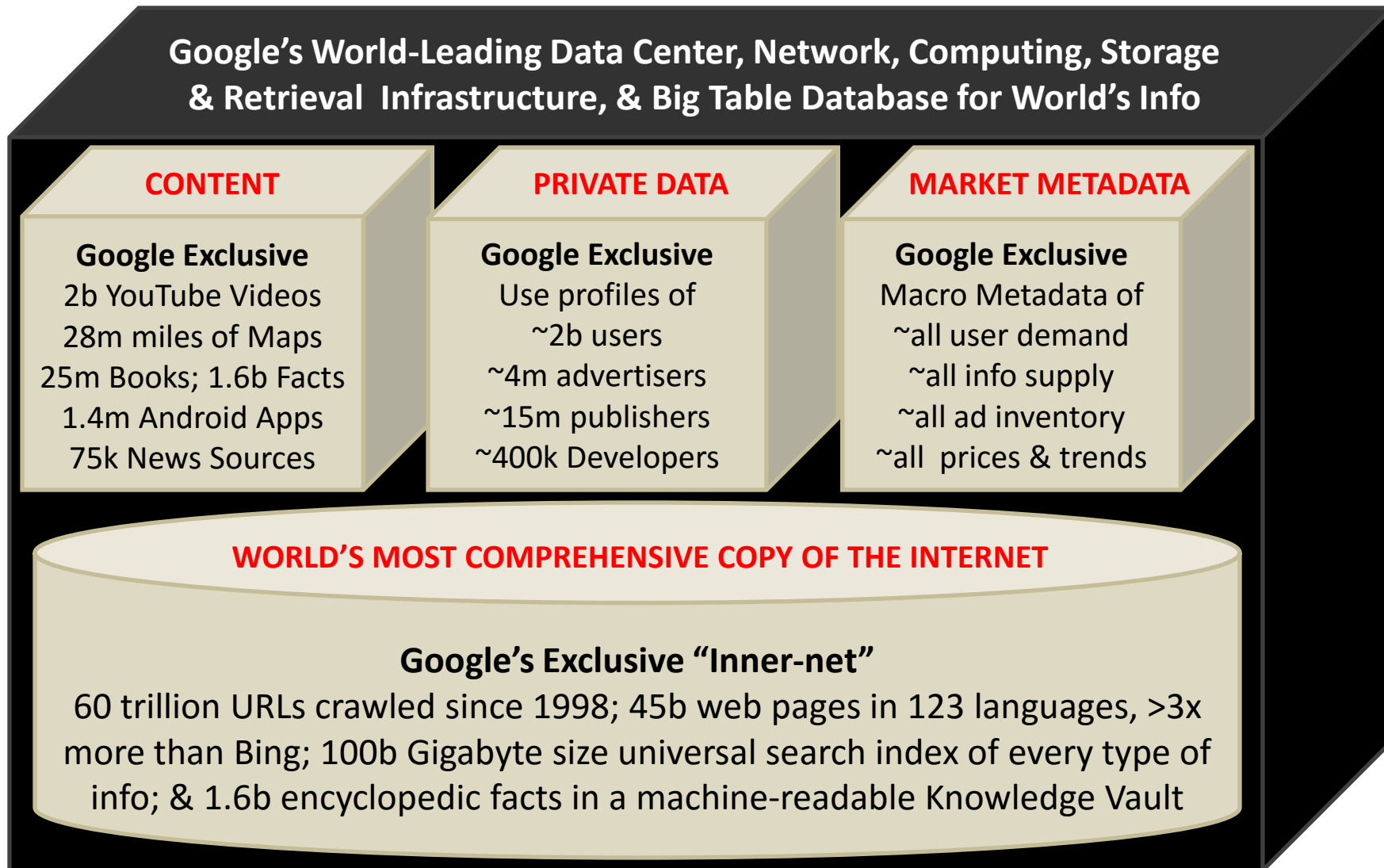
## -- By the Numbers

1. Unique Searchable **Links**: Since **1998**, **>60 trillion URLs crawled** for Google Universal Search - [Google](#).
2. Unique **Search Index** Scope: Since **1998**, **>45 billion total web pages** in Google's ongoing Universal Search Index accessible in 123 languages, *3x more than Bing* [per WorldWideWebSize](#).
3. Unique **Search Index Size**: Since **1998**, now **>100m gigabyte Index** size of Universal Search [per Google](#).
4. Unique **Map Corpus**: Since **2001** for Earth, **2005** for Maps, and **2007** for Street View, 28m miles of mapped [roads](#), 94% of countries, 5m miles of Street View in 50 [countries](#), and 75% of global pop. can [view](#) their homes, via most comprehensive satellite, aerial, & Street View maps in 74 languages.
5. Unique **News Corpus**: Since **2002**, **~75,000 news sources/publications** are aggregated, organized and archived for Google News and accessible in 60 country-specific editions in 35 languages [per Google](#).
6. Unique **Book Corpus**: Since **2004**, **>25 million books** copied, aggregated, cached, & archived for Google Books of the 130 million distinct book titles that Google alone intends to scan per [Google Book Search](#).
7. Unique **Video Corpus**: Since **2006**, **~2 billion total videos** comprising ~200 million hours of video is aggregated, cached, organized and archived in YouTube's library, per [Bernstein Research](#) 5-11-16, and localized in 88 countries in 137 languages [per YouTube & Wikipedia](#).
8. Unique **App Corpus**: Since **2008**, **>1.4 million Android apps** on Android Market/Google Play [per Google](#).
9. Unique **Fact Corpus**: Since **2010**, **>1.6 billion encyclopedic facts** from buying Metaweb and archived in Google's machine readable "Knowledge Vault" per [New Scientist](#), that populate the top "answer" or "knowledge panel" in [one third](#) of Google's searches; sort of a Google ~Wikipedia.
10. Unique **Museum Art Corpus**: Since **2012**, **1,100 museums & 400k+ artworks** in 61 countries have archived digital reproductions of their art collections with Google's Cultural Institute [per Google](#).

# Google's Consumer Info-opoly

## *Google's Unmatchable Hoard of the World's Accessible Digital Information*

*"The Internet makes information available; Google makes it accessible."* Google Economist Hal Varian [11-09](#)



# **“Competition Law and Data” Joint Paper**

*10<sup>th</sup> May 2016 by Bundeskartellamt & Autorité de la Concurrence*

- *“There are several possible “data-based” conducts, whether exclusionary or exploitative, which could, depending on the circumstances of the case, lead to enforcement action.*
- *However, the theories of harm underlying the prohibition of such conducts are premised, for the most part, on the capacity for a firm to derive market power from its ability to sustain a data trove unmatched by its competitors.*
- *A case-specific assessment of the reality and extent of the “data advantage” needs to be undertaken to bear out or reject this premise.” p. 53*



# Why is Google's Consumer Info-opoly Enduring?

## *A. Only Google Aggregates the World's Information*

- Only **Google** has:
  - Comprehensively aggregated and organized the world's accessible digital information; and
  - An ***information-centric*** mission & business model.
- Concerning the most likely potential competitors:
  1. **Facebook** is a social media company; it withdrew its Bing search after Google nixed its Google+ social effort in 2014;
  2. **Microsoft** is a proprietary software company; it's substantially retreated from mobile search, OS, maps, & info aggregation;
  3. **Amazon** is a retail ecommerce and an enterprise cloud computing company; and
  4. **Apple** is a device manufacturer.

# Why is Google's Consumer Info-opoly Enduring?

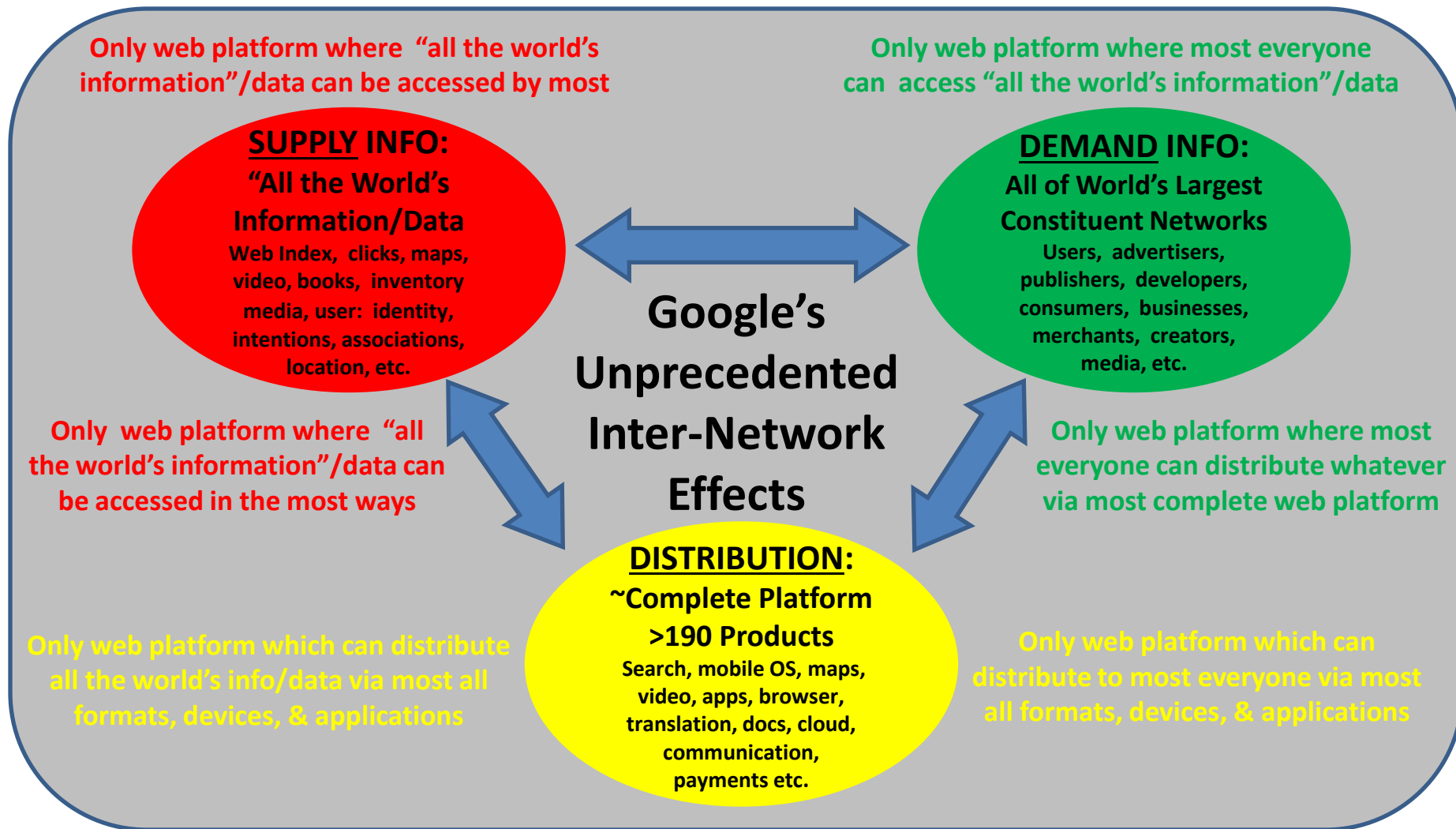
## *B. Overwhelming Barriers to Compete*

- **Entry Ante:**
  - Google's [invested](#) \$300b over 18 years to aggregate the world's info and generated >\$400b in revenues
- **Financial Advantages:**
  - Google [commands](#): ~\$500b in market value, ~\$80b in annual revenue, ~20% growth, ~\$80b in cash, ~\$28b in cash flow, and >66,000 employees
- **Time-to-Market Advantages:**
  - Google commands a ~10-18 year lead in aggregating the world's different corpuses of info/data
- **Infrastructure/Expertise Advantages:**
  - 15 of world's fastest, highest capacity data centers; most data center cap-ex investment >\$28b [2006](#) – [2014](#); most corporate acquisitions 2006-2016 [168](#); and >1500 server points of presence in >140 countries per [USC](#)

# Why is Google's Consumer Info-opoly Enduring?

## C. Google Commands Unmatchable Inter-Network Effects

*So more users more information, more information more users, more advertisers more users, more users more advertisers, it's a beautiful thing, lather, rinse repeat, that's what I do for a living. So that's ... 'the engine that can't be stopped.'*" Google SVP Rosenberg [2-08](#)



# Google Publicly Admits to its Core Predatory Pricing & Anticompetitive Monopoly Cross Subsidization Model

- In defending Google's free Android OS against EU antitrust charges on Google's Europe blog, Kent Walker, Google SVP & General Counsel publicly [admitted](#):
  - *"Of course while Android is free for manufacturers to use, it's costly to develop, improve, keep secure, and defend against patent suits. We provide Android for free, and offset our costs through the revenue we generate on our Google apps and services we distribute via Android."*
- When Google fixed a predatory Android business model, Google search was dominant in U.S. (>70% share) per DOJ ([2008/2010](#)) and in EU (>90% share) per EU [2010](#).
- Google knew it alone could recoup its very large Android costs and profit from a free Android OS, because Google alone commanded the:
  - Monopoly search/search advertising profits to cross-subsidize Android's huge multi-billion costs to extend its desktop search dominance into mobile; and
  - Market power to contractually tie manufacturers use of Android with mandatory preferential placement of Google search and other search-dependent apps like YouTube, Maps and Play.
- Google's predation drove competitive operating systems -- Symbian, Windows, Blackberry, and others – [completely out of the market](#) from 2009 to 2016.
- Google also fixed a predatory price of free by not offering a paid Android OS alternative that would allow manufacturers the choice of no tying requirements.

# Decoding Google's Multi-sided Pricing Model

- The [book](#) “*How Google Works*,” by Google’s Eric Schmidt, explains multi-sided market pricing that optimizes growth. For more insight he recommends reading HBR [article](#): “*Strategies for Two Sided Markets*” (in note 66).
- The HBR [article](#) on pricing strategy in two-sided markets explains:
  - “...platforms catalyze a virtuous cycle: More demand from one user group spurs more from the other.” ... “The key challenge? Get pricing right: “Subsidize” one user group while charging the other a premium for access to the subsidized group. Adobe’s Acrobat PDF market comprises document readers and writers. Readers pay nothing for Acrobat software. Document producers, who prize this 500-million-strong audience, pay \$299.”
  - “GET PRICING RIGHT Consider these pricing strategies: Subsidize quality - and price-sensitive users. For example, if PDF document readers were charged even a tiny amount, Adobe Acrobat Reader’s immense user base would be much smaller, reducing document producers’ interest and their willingness to pay a premium for access to readers. Readers, much more price sensitive than document producers, wouldn’t pay for access to a bigger base of writers.”
  - «Secure “marquee” users’ exclusive participation in your platform. Providing incentives for marquee users (for instance, anchor stores in a mall) to participate exclusively in your platform (the mall) can attract more users from the other user group (retailers who lease space in malls with prestigious anchor stores). Result? Your platform’s growth accelerates.”
- To secure “marquee” **exclusive** users, Google bought: [Keyhole](#) maps; [YouTube](#) \$1.6b; [Metaweb’s](#) database 12m things; [Waze](#) \$1b; copied 25m books, 400k artworks, & patents.
- To “get pricing right” Google “optimized for growth” by cross-subsidizing users with free search etc. to maximize its user network, to maximize its monopoly advertising profits.

# Google's Predatory Wholesale Info Pricing

- **Google leverages its info-opoly market power to dictate predatory pricing & models:**
  - **Dictate economic pricing model** of “abundance” and “free” information on the traditional scarcity economic model for information that is naturally scarce, high cost/value, and based upon intellectual property;
  - **Dictate fixed information acquisition price of zero** (below cost) to reside on Google's supercomputer and be offered globally as advertising inventory to be monetized; &
  - **Dictate consignment pricing model** where the info-creator must assume all the business costs and risks of creating, packaging and offering its info inventory wholesale to Google, for payment from Google only if and when, Google monetizes it on Google's info-opoly terms and conditions.
- Google predatorily excludes wholesale information providers info inventory from Google's unique search audience if wholesale info supplier insists on some payment.
- Every time Google forces proprietary info-owners' information to be free, when Google knows that info has large fixed costs and scarcity value, Google predatorily maximizes the illusion of free to users to maximize their user base at others' expense, to in turn maximize their monopoly advertising profits.
- **No one can compete with an info-opoly monetizing competitors' content at zero-cost.**

# Google Info-opoly's Predatory Wholesale Pricing Model

*Google's "Information is Power" over Wholesale Info Suppliers*

## Google's Black Box Pricing Model

<u>Market</u>	<u>User Generated</u>	<u>Web Publisher</u>	<u>Offline Paid Content Online</u>
Demand	Low	High	PIRATED-HIGH/PAID-LOW
User Price	Free: Pay with Data	Free: Pay with Data	FORCED FREE WHOLESale
Monetization	None	~100% Targeted Ads	ADS/PIRACY/SCRAPING
<b>INFO-OPOLY</b>	<b>CENSOR</b>	<b>FIX MODEL/SPLITS/TERMS</b>	<b>PIRATE/PRICE FIX/EXCLUDE</b>
Network Effects	Viral	Viral	Non-Viral
Supplier Model	Sharing	Ad-Based Publishing	Paid Subscription + Ads
Value	Low	Medium	High
Supply Price	Free to Upload	Free If See Ads	Subscription Price + Ads
Supply	Abundant	Abundant	Scarce

# Examples of Google's Decade-Long Pattern of Forcing a Predatory Wholesale Price of Zero on Info Suppliers

1. **Video Piracy:** Prior to Google buying YouTube, Google SVP Rosenberg emailed CEO Eric Schmidt and co-founders Page and Brin advising: *"Pressure premium content providers to change their model towards free; Adopt 'or else' stance re prosecution of copyright infringement elsewhere; ..."[w]e may be able to coax or force access to viral premium content," noting that Google Video could "Threaten a change in copyright policy" and "use threat to get deal sign-up."* [Bold added.] *Viacom v. YouTube* [SUF #161](#) Google has predatorily priced for a decade.
2. **Google News:** After Spain and Germany legislation separately required payment for Google news links, Google demanded a zero-cost price and excluded them from Google Search and traffic referrals, forcing them with their market power to concede to Google's Scraping Scheme at an implicit forced wholesale info price of zero.
3. **Google Images:** Getty's EU antitrust [complaint](#) against Google charges that after 12 years of offering thumbnails of copyrighted photos with links to the owner, Google in 2013 offered full resolution images with no link to owner for payment -- harming 200k contributors. This was a conscious new decision to force a zero price for info.
4. **Scraping:** The FTC Staff Report [found](#) Google illegally scraped proprietary content from Yelp, Trip Advisor and Amazon during 2011-12 that forced a wholesale info price of zero on at least three more industries.
5. **Google Books:** In copying millions of books and claiming fair use Google again [forced](#) a wholesale price of a book at zero. Only when sued for mass copyright infringement did Google agree to pay nominally for the use of books.
6. **YouTube Music:** Google-YouTube [abuses](#) its market power to [deny](#) musicians their property rights to choose which of their songs are in a paid subscription service and which are free, predatorily forcing some prices to zero.
7. **Oracle v. Google:** In uniquely [asserting](#) that the wholesale price for a Java API license was zero when every other corporation paid for a Java API license to develop software, Google abused its dominance by predatorily pricing valuable info at zero to generate "free" viral network effects to dominate the nascent licensed mobile OS market.



# Structurally, Google's Enduring Info-opoly

## Has Three Main Parts: Information, Info-Access & Advertising

Advertisers  
PAY Info-  
opoly Prices

### Monetization via Google's "Strongest Advertising Network"

*"Ultimately our goal at Google is to have the strongest advertising network and all the world's information." Schmidt [8-06](#)*

APIs

FREE  
Info-opoly  
Access  
Software  
& Apps  
for Users

SEARCH

ANDROID OS

PLAY STORE

YouTube

Maps

Chrome

Gmail

Docs

180 Moe Products

APIs

FREE  
Info  
for Users

### SOURCE OF GOOGLE'S INFO-OPOLY MARKET POWER

Unmatchable Cache of World's Accessible Digital Information  
Optimized with a Unique Bigtable Data Storage & Retrieval System  
Highest Capacity Data Centers, Network & Computing Infrastructure

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- Scott Cleland was the first analyst to foresee that Google would become a global monopoly with minimal accountability that would lead to severe competition, privacy, and property rights problems.
- Scott Cleland served as Deputy U.S. Coordinator for International Communications & Information Policy in the George H. W. Bush Administration.
- He is President of [Precursor LLC](#), an internetization consultancy for Fortune 500 companies, some of which are Google competitors. He is Chairman of NetCompetition a pro-competition e-forum supported by broadband interests.
- Cleland is also author of *"Search & Destroy: Why You Can't Trust Google Inc."* Cleland has testified before the Senate and House antitrust subcommittees on Google and the House oversight subcommittee on Google's privacy problems.
- Cleland also authors the widely-read [www.PrecursorBlog.com](http://www.PrecursorBlog.com); and publishes [www.GoogleMonitor.com](http://www.GoogleMonitor.com) and [www.Googleopoly.net](http://www.Googleopoly.net).