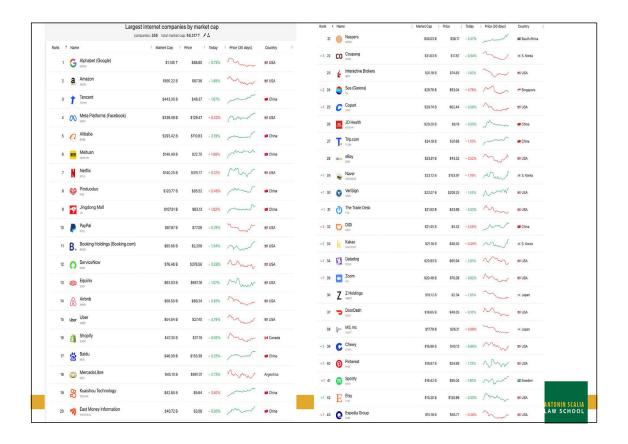
1–1

Potential Anticompetitive Practices of Online Platforms

Antitrust & Digital Markets

John M. Yun Antonin Scalia Law School George Mason University









Role of Presumptions in Antitrust

- **Presumptions** are a critical part of how antitrust laws are interpreted.
- While the ultimate **burden of persuasion** is with the **plaintiff**, within a **rule of reason**, there is a burden-shifting framework that involves:
 - <u>Step 1</u>: *Prima facie* burden of production on the plaintiff to show anticompetitive harm or harm to the "competitive process."
 - Step 2: Burden of production shifts to the defendant to prove efficiencies.
 - Step 3: Burden of production shifts back to the plaintiff to demonstrate there are less restrictive alternatives to achieve efficiencies.



The Stain of "Original Sin"

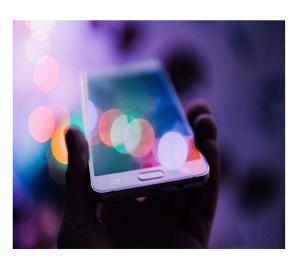
- DG Comp Report: "[D]ominant digital firms have strong incentives to engage in anti-competitive behaviour" (p. 3).
- <u>Objective</u>: Change presumptions regarding digital platforms.
 - Reform through antitrust jurisprudence
 - Reform through regulation



Focus for Today's Talk

- 1) <u>Economics of Network Effects &</u> Platforms
- 2) Are there "data-driven network effects" that create barriers to entry?





NETWORK EFFECTS & PLATFORMS



"Conventional" Products The second of the s





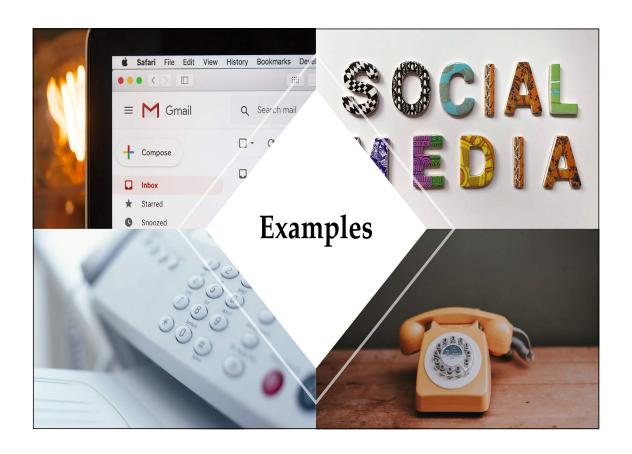
"There are many products for which the utility that a user derives from consumption of the good increases with the number of other agents consuming the good...[and therefore] depends upon the number of other users who are in the same network." – Michael Katz and Carl Shapiro, American Economic Review (1985)



Pause...

- Your consumption value is a function of **the number of other people** consuming the product.
- That is, your valuation depends on the size of the "network."







Network Effects

- <u>Direct Network Effect</u> (<u>defn</u>): A product is more valuable the more people use it.
- Joining a network creates two effects: (1) **private gain** to the individual and (2) a **social benefit** to others on the network (or potentially on the network).
 - Thus, there is an <u>adoption externality</u> (i.e., a third-party benefits from your participation). The question is the size & significance of the effect.



Autarky v. Synchronization Value

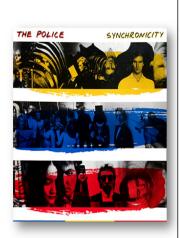
- <u>Autarky Value</u>: The value of a product if no one else uses it.
- High for "regular" products like sneakers, cars, water bottles, etc.
- Low for networked products like email, fax machines, etc.





Autarky v. Synchronization Value

- <u>Synchronization Value</u>: Additional value from others being on the same "network."
- High for networked products including social media like Twitter, Facebook, etc.
- Low for "regular" products (e.g., sub sandwich).





Autarky v. Synchronization Value

- *Not* a "0/1" classification, however.
- E.g., Diminishing returns * to synchronization.
- E.g., Not all new potential connections • are valuable.
- E.g., Even "regular" products can benefit from having a bigger network...



Autarky v. Synchronization Value

- <u>Honda Accord</u>: Strong autarky value but also value in having a bigger network of owners (parts, repairs shops, dealers).
- <u>Electric cars</u>: More owners mean more infrastructure.
- <u>Grocery store</u>: More customers mean more turnover of items, which could mean fresher produce, meats, etc.
- Google Search: More users give Google more data, but users may not really care about the network per se.
- <u>iPhone</u>: Autarky value (calls, camera, photos, maps) plus synchronization value (App Store).

Multiple networks can coexist

- 1. Consumers have <u>heterogenous tastes</u>, which lead to product **differentiation**.
- **2.** <u>Switching costs</u> can be low. Leads to "<u>multi-homing</u>," that is, the use of more than one network within a market.
- 3. The <u>strength of a network</u> is not necessarily a function of its size as network effects can be <u>very local</u> (*see* Tucker).
 - Use v. users; intensity of preferences; OpenTable (right network v. size)
 - The presence of certain groups (*e.g.*, kids v. parents) could result in a negative spillover effects from a certain network.



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Network Effects Impact Monetization Strategies

- <u>Q1</u>: What really unlocks value for networked products?
- <u>A1</u>: Having more users.
- Q2: What does the law of demand tell us?
- <u>A2</u>: Having a high price discourages users and use.
- **Incentivized to price low for access** and to capture revenue in other ways.



What are these "other ways"?

- Basically, use a related service to monetize based on a large user base:
 - advertising,
 - selling access to third party sellers (Amazon Marketplace, App Store),
 - <u>selling own services to the user base</u>
 (freemium model—like online influencers).











Ride Sharing



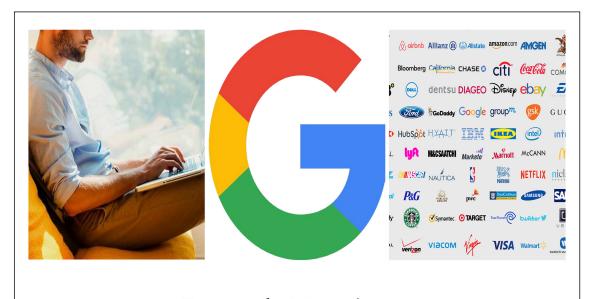






Credit Cards





Search Engines



Platform Network Effects

- <u>Indirect-network effect = Cross-group</u> <u>effect</u> (<u>defn</u>): The value of a product increases for one group the more that another group participates.
- <u>Platforms can also have direct network</u> <u>effects but not always.</u>



Examples of Indirect Network Effects

- <u>Ex</u>: An **iPhone** is more valuable to <u>users</u> the more <u>app developers</u> there are.
- <u>Ex</u>: A **credit card** is more valuable to <u>cardholders</u> the more <u>merchants</u> accept it.
- Indirect network effects are the foundation of multi-sided platforms.





IS HAVING BIG DATA ALSO A "NETWORK EFFECT"?



Data Driven "Network Effects"?

- "Virtuous data circle:"
 more users → more data →
 better search results →
 more users
- Unstoppable process where new entrants cannot compete with incumbents.





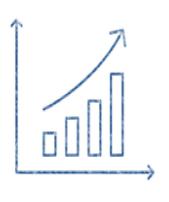
Data Driven "Network Effects"?

• Stigler Report: "A data advantage over rivals can enable a company to achieve a virtuous circle of critical economies of scale leading to network effects, and a competitive balance in its favor, leading to the gathering of yet more data."



Three Observations

• Point 1: This effect is entirely premised on increasing quality to <u>users</u> (which increases their welfare), which increases the participation of <u>advertisers</u> (which increases their welfare).





Three Observations

- <u>Point 2</u>: **Too narrowly focused on a single factor** that improves platform quality: <u>data</u>, which has diminishing returns.
 - Other factors: algorithms, engineering skill & talent, infrastructure, & design



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Three Observations

• Point 3: Missing a key step: More data does not simply, without cost, result in a higher quality service or more innovation.







Incorporating a "Cost Step"

- Can think of using big data as a **two-step process**: (1) collect the data and (2) innovate based on the data.
- More akin to a "data opportunity" rather than "network effect."
 - Like investments in R&D and other investments in intellectual property and product improvements.

Empty Promises of Data Moats

- Andreeseen Horowitz, U.S. **venture capital** firm in Silicon Valley with \$12 billion in assets.
 - "There generally isn't an inherent network effect that comes from merely having more data."
 - "The point of this is not to make a categorical statement about the utility of data as a defensive moat — our point is that defensibility is not inherent to data itself."
 - "Early in the data journey, getting to the minimum viable corpus requires relatively low investment."
 - "None of this is to suggest data is pointless! But it does need more thoughtful consideration than leaping from 'we have lots of data' to 'therefore we have long-term defensibility'."



Case Study: Google+

- Launched on June 28, 2011.
- Google: "We're transforming Google itself into a social destination at a **level and scale that we've never attempted**—orders of magnitude **more investment**, in terms of people, than any previous project."





So what happened?





So what really happened?





MONSTER LASH

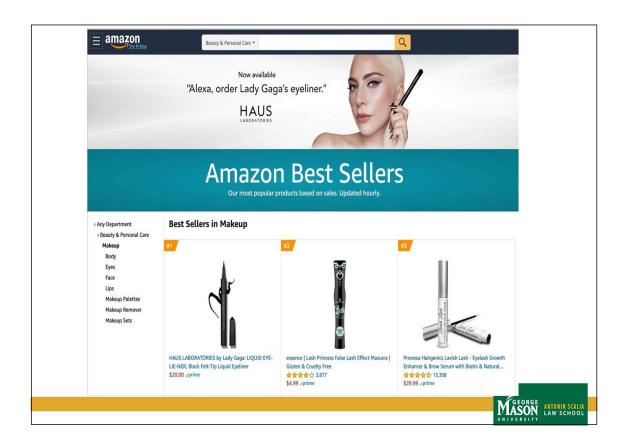
Lady Gaga is Amazon's golden ticket to beauty domination



Published July 10, 2019 • This article is more than 2 years old.

Lady Gaga has finally announced the launch of her cosmetics line, Haus Laboratories. Rumors of the line—a glitter-heavy, escalated drugstore-inspired collection—have been swirling for some time. What came as a surprise was who Gaga chose to be her exclusive launch partner: Amazon.com.





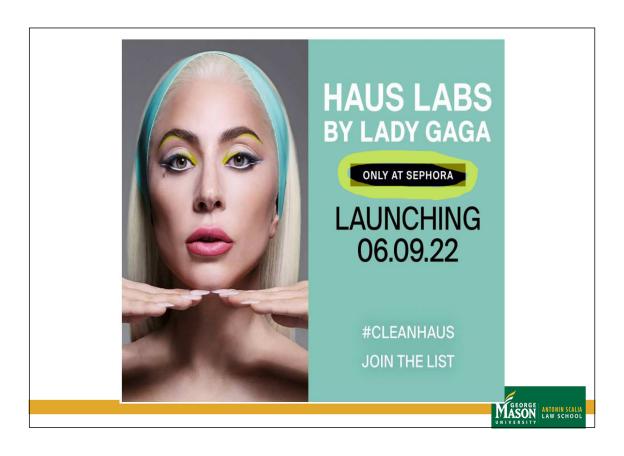
So what really happened?

MAY 17, 2022

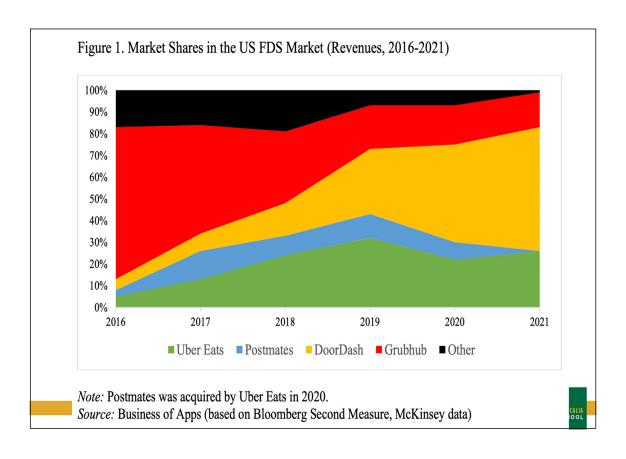
Lady Gaga's Beauty Brand Gives Up on Amazon

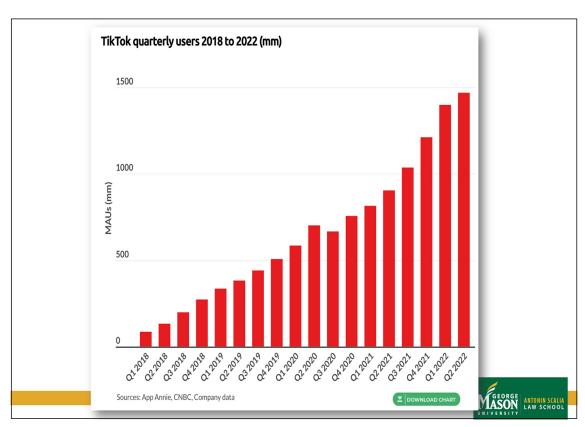
Three years ago, Lady Gaga launched a cosmetics brand Haus Laboratories to be sold exclusively through Amazon. However, the brand flopped and is set to relaunch at Sephora. The relaunched brand will no longer be available on Amazon.











First Mover Advantages?

- Certainly, on some dimensions.
- However, could also have first mover disadvantages (Selçukhan Ünekbas).
- Entrepreneurial activity occurs in face of both **uncertainty** (that is, we do not know what will happen) and **imperfect information** (that is, the truth is out there but is costly to obtain).



First Mover Disadvantages

- Market pioneers can lower uncertainty and increases information, which benefits potential entrants.
 - Cf. Liad's work on large tech firms buying startups can spur others to acquire in the same space.
- <u>Nutshell</u>: First movers *can* lower the cost of entry. Although, there are advantages to being first as well.



Thank you!

