Competition online, big data, etc.

8 November 2018

Adam Cohen
### Who’s competing online?

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<thead>
<tr>
<th>Product</th>
<th>AMZN</th>
<th>AAPL</th>
<th>GOOG</th>
<th>FB</th>
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**Shopping**
- Amazon
- eBay
- Asos
- Argos
- MediaMarkt
- Gumtree
- Zalando
- Idealo.de

**Travel**
- Booking.com
- Opodo
- Orbitz
- Kayak
- Expedia
- Trivago
- Travelocity

**Local**
- TripAdvisor
- TimeOut
- OpenTable
- Yelp
- ViaMichelin
- LaFourchette
Who’s mediating access?

**Daily Mail**

- Direct: 48.03%
- Referrals: 6.24%
- Search: 31.90%
- Social: 11.81%
- Mail: 3.47%
- Display: 0.05%

**rightmove**

- Direct: 53.02%
- Referrals: 6.76%
- Search: 40.01%
- Social: 3.12%
- Mail: 3.64%
- Display: 0.01%

**Lloyds Bank**

- Direct: 34.05%
- Referrals: 65.13%
- Search: 2.87%
- Social: 3.02%
- Mail: 4.11%
- Display: 0.01%

**AutoTrader**

- Direct: 54.14%
- Referrals: 1.56%
- Search: 39.24%
- Social: 3.25%
- Mail: 2.13%
- Display: 0.09%

**ocado**

- Direct: 53.89%
- Referrals: 2.66%
- Search: 34.18%
- Social: 2.42%
- Mail: 7.25%
- Display: 0.01%

*source: SimilarWeb, desktop only*
Diverse access, varied distribution

More access via mobile devices, apps

More traffic from social networks

![Graph showing access via mobile devices and social networks](image-url)
Is competing online easier?

Barriers to entry? Do new entrants have to pay costs that incumbents didn't?

Incumbents often incurred *higher* costs than new entrants due to:

- Data centers
- Cloud computing
- Open source software
- Expertise for hire
- Outsourced customer support

High, fixed costs have become lower, variable costs
What about network effects?

Direct network effects: more users make the product more valuable to more users (Facebook, Skype, Twitter)

Indirect network effects: →more devices→more developers→more users→more devices (Windows, Android, Apple)

- Common in two-sided markets: more users→more merchants, auctioneers, drivers, etc.→more users (Amazon, Uber, eBay, PayPal)

What about Google search?

- More users ≠ more users
- More users = more advertisers, but more advertisers ≠ more users
Do network effects hinder competition?


- Timeline of social media platforms (2003-2016)
Existing networks benefit new entrants

Ride sharing services are “adopting” Uber’s network

Sports/fitness, dating, and information and gaming apps are “social” thanks to Facebook
Are there network effects from data?

→more users→more data→better and cheaper product→more users

● Supply side phenomenon, not based on demand
● Not specific to search; overstates the value of search data

→more customers→more revenue→more investment→better and cheaper product→more customers

So how do you compete? Data is easy obtain and non-rivalrous

● Google 411, Google Image Search, Google Translate
● SeaHero Quest, launched in May 2016 >500k downloads in one week, now >5m
How does Google use data?

What about search?
● Method matters most; Google overtook Yahoo
● Search is not a matching function; need a broad index and a method for surfaced the web; roughly 25% of distinct queries in a given day are new

What about Ads?
● Three types:
  ○ Contextual -- home and garden section, golf website
  ○ Search -- responsive to a query, not personalized
  ○ Display -- sometimes called interest-based; subject to user control/privacy