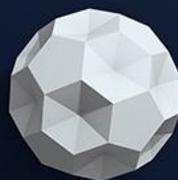# Antitrust Concerns in Digital Markets:

Anticompetitive theories, Mergers and more ….

**3rd Annual International Conference
"Digital Economy and Competition Policy"**

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The underlying anxiety around Big Tech and platforms…

They are big, move fast, protected by "network barriers to entry", occupy new territory by swinging their user base into adjacent services, allocating internet traffic and buying up nascent competitors

Dilemma

Benefits of "competition for the market" between platforms in terms of innovation, vs competition/innovation "nipped in the bud" by super-dominant platforms?

Pace of innovation on new frontiers does not mean there isn't a problem:

- Are incumbents leveraging their position to win the race into new markets? Buying up all challengers?

- Could tech firms be distorting competition / outcomes in markets where they aren't even present (e.g. news)?

But, how do we intervene? Competition is cumbersome and takes ages…

A few selected issues for discussion…

ANTICOMPETITIVE THEORIES

Opportunities for integrating complements: greater *foreclosure risk?*

Should we be worried about platforms ability to "allocate traffic" in a way that favours their businesses over that of competitors? Is "self favouring" a theory of harm?

How is the concern about "Big Data" evolving over time?

MERGERS

MARKET DEFINITION

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1. Foreclosure risk? Integrating complements and "traffic allocation"

Fundamental trade-off between pro-competitive benefits of "integrating complements" vs. foreclosure risk

Foreclosure issues "powered up" in digital environments by *huge complementarities,* and innovation through "integrating" complements

Rivals in the complement claim they are being foreclosed, and network effects and risk of tipping make this urgent and more real.

Fundamental issue is how to trade-off efficiency benefits against foreclosure risk. Do we need new economic theory/tools? **No, but we need to understand things are evolving! Cannot be stuck in the same 1990s theories of harm ….**

- **Starting presumption that bringing together complementary products is good remains.** Needs to show credible mechanism to generate exclusionary incentives

- **Models/mechanisms that break this presumption have been around for some time:** e.g. dynamic leveraging stories based on network effects (Microsoft). New innovations (e.g. zero price constraints in two-sided markets), but remains case that foreclosure exception not the rule.

Proliferation of complaints does not mean the risk is higher. BUT new issues.

Distinguishing between problematic and unproblematic cases

Applying existing tools rigorously. Claims of "network effects" and "distribution advantages" should not be enough to extract "me too" remedies

Microsoft/LinkedIn

Vs.

Android

Need a proper theory of harm:

- Why doesn't the "one monopoly profit" theorem apply? Why doesn't allowing consumers to mix and match raise the dominant firm's profits?

- Need to be applied to the facts while acknowledging foreclosure exception not the rule

Once we agree appropriate standard is *anticompetitive* foreclosure empirical screens exist to separate the good from the bad:

- **How important is the tying good as a distribution channel?** Difference between obtaining default status on ~100% of mobile devices, vs. an advantage in desktop in a mobile-focussed world

- **How effective is the tie at driving behaviour?** Default bias is well documented, would a "sign up now" prompt in Windows do the same?

- **How prone is the market to "tipping"?** Need to distinguish between markets with significant differentiation and multi-homing from those without

- **How important are any efficiency benefits?** Bigger the benefits from integration the greater the risk of false positives

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Traffic allocation as a theory of harm?

"Equal treatment" might be an appropriate <u>remedy</u>, but not an economic basis for intervention in the first place.

Is there a plausible theory of harm? No doubt platforms <u>could</u> have ability/incentive to "divert traffic" in way that forecloses rivals & harms consumers

- Clear that search rankings influence traffic (even for established sites). Explanations focussed on reverse causality implausible/unsupported

- Literature (e.g. de Corniere & Taylor) shows ad revenue can provide static incentive to "divert traffic" in way that harms consumers.

- Also dynamic incentives if certain business models threaten search ecosystem

Difficulties mostly relate to avoiding false positives and retaining dynamic incentives:

- **Causality?** How to unpick the impact of conduct from other factors that might cause businesses to decline/fail? Easier if conduct changes abrupt

- **Efficiencies?** What if downgraded sites less efficient/lower quality? What if aspects of the conduct generated new functionality?

- **What is the benchmark for pro-competitive behaviour?** We allow some profitable distortions to search results (all ads are distortionary). So where should we draw the line?

Google search rankings can change abruptly

Ranking changes significantly drive traffic *even for established sites*

Wall Street Journal's Google traffic drops 44% after pulling out of First Click Free

Despite less traffic, paid subscriber conversion said to be up fourfold.

Danny Sullivan on June 5, 2017 at 4:48 pm

2. We are beginning to understand the role of data…

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Data as a competition problem?

Original story (a la Microsoft/Bing) was that data was a barrier to entry. More data means better search results (better ability to answer "tail queries" leads to scale effects).

But, hard to articulate as a competition problem:

- How much of benefits are due to volume of data per se, and how much due to analytics? Can't data be gathered from other sources?

- A lot of effort goes into generating these datasets and techniques to interrogate them: "forced sharing" risks treating "learning by doing" as a competition problem

This approach didn't get traction in Shopping. Concerns arise around using existing market power to entrench data collection and aggregation capabilities, and preserve asymmetric access to it

Not just a buzz word: big data is already having profound effects on content producers

Google/FB's core business remains advertising where data is key

- Advertisers want measurable impact: need to know ads targeted at the "right" eyeballs

- Platforms' data allows them to better target ads and also demonstrate performance

- Improved analytics reduces need to target ads indirectly based on content (beer ads on sports pages)

- Advertising increasingly *programmatic* and impersonal (allocated via ad exchanges) with advertisers agnostic as to where ads are shown

Ability to use data from search and SNs to identify relevant consumers and build "super profiles" shifts value added from content producers to firms with greatest data/analytics capability

Old paradigm: use content to target advertising

Decathlon
Caperlan Lure ...
£11.99
Decathlon UK

New paradigm: advertising allocated using ad exchanges and targeted using personalised data

So the story is changing…..

Platforms add value for advertisers by better targeting ads at the right consumers…

- **…so content producers need to adapt:** either find ways to improve own targeting (e.g. by improving their own analytics/data collection abilities) or alternative ways to monetise (e.g. subscriptions, micropayments)
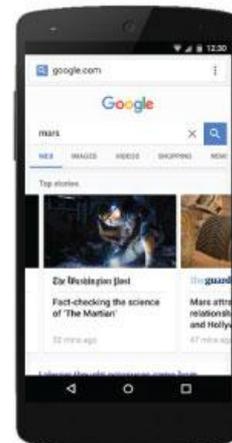
Relevance to antitrust? <u>There may be incentives for platforms to protect / preserve the data generation process through various forms of coercive behaviour</u>

- Dominant platforms may have incentive to push services on third parties that enhance or preserve their data collection capabilities. **Abuse?**

- Or push complementary providers into adopting business models that maximise the value of their services. **Abuse?**

- Or take steps that restrict data access for third parties (e.g. rival intermediation services) maximising "data asymmetry" and preventing rivals from emerging. **Abuse?**

Facebook Instant Articles

Google AMP

Not just a simple story that "big is bad" or that data is a barrier to entry. Rather a more complex mechanism where platforms take actions to reduce access/traffic/data for others in way that harms consumer welfare

Fake news as an antitrust problem?

Desire to keep users within their ecosystem and maximise opportunities to serve ads/collect data may introduce a disconnect from consumer welfare

For example, incentives could contribute to issues around fake news:

- Platforms benefit from a fragmented media landscape.

- Have incentives to target metrics (e.g. shares, likes, impressions) that may not correspond with quality

- This in turn gives publishers incentives to adapt to new paradigm by "chasing traffic"

- Platforms unlikely to internalise negative impacts on consumer or social welfare

Suppose platforms used their market power in ways that distorted competition between publishers in ways that exacerbated these social problems? Would that be grounds for intervention?

"Publishers that are funded by algorithmic ads are locked in a race to the bottom in pursuit of any audience they can find – desperately binge-publishing without checking facts, pushing out the most shrill and most extreme stories to boost clicks. But even this huge scale can no longer secure enough revenue.

On some sites, journalists who learned in training that "news is something that someone, somewhere doesn't want published" churn out 10 commodified stories a day without making a phone call."

Katherine Viner
(Guardian editor-in-chief, 19 November 2017)

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4. If there is time… mergers

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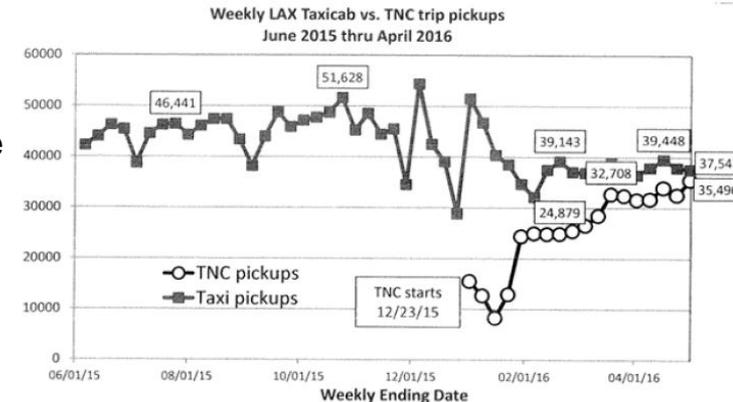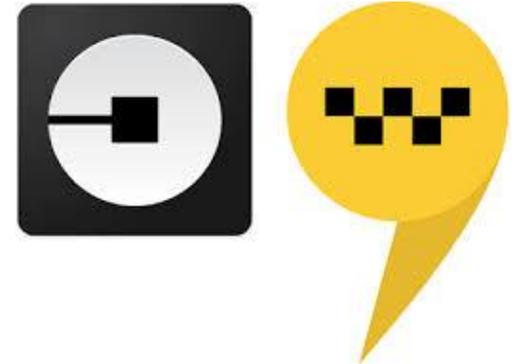# Uber/Yandex Taxis....

Merger in a **two-sided market:**

- Taxi "aggregators" need to attract both riders and drivers
- Both categories care about presence of other
- Riders want a service with plenty of drivers to provide trips in timely manner. Drivers want plenty of riders to deliver trips

Two-sidedness generates specific requirements for competition assessment:

- Need to consider constraints on both sides…
- But also need to consider linkages between markets…
- …and efficiencies (e.g. greater network density allows more efficient rider/driver matching and makes it easier to introduce new products)

Both parties are disruptive players that are displacing incumbent transport modes.

- How to define markets in fast-moving, two-sided industries?
- What data/analysis should we rely on to predict price effects?

Weekly LAX Taxicab vs. TNC trip pickups
June 2015 thru April 2016

Market definition on the rider side

Easy to fall into "trap" of defining markets based on functionality aren't smartphone apps obviously "different" from incumbent transport modes
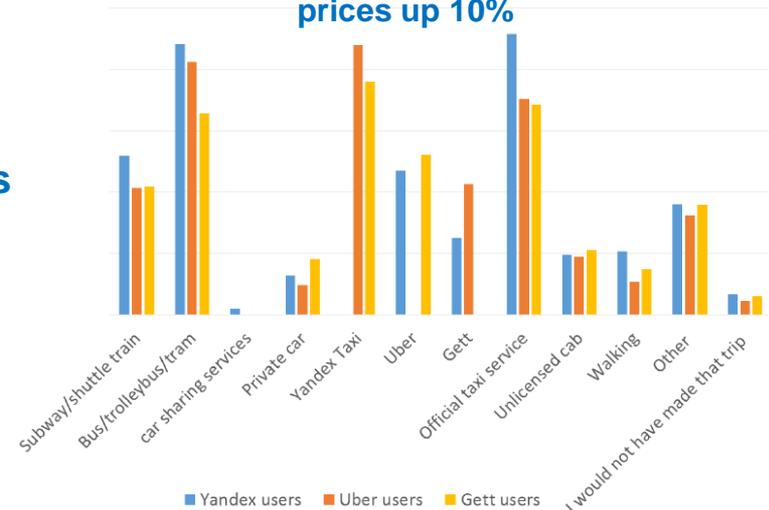
But, what really matters for competitive constraints is consumer substitution patterns

- Consumer surveys show price increases for preferred ridesharing would divert consumers to public transport more than competing ridesharing services

- Consistent with findings from "natural experiments" in other countries (e.g. London "night tube")

- Also consistent with growth of ridesharing: 12x more Uber trips in San Francisco than taxi trips. <u>Clearly ridesharing is winning share from incumbents</u>
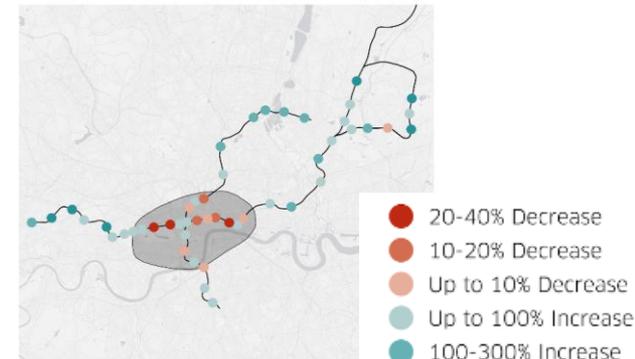
Pattern of substitution limits risk of merger-specific price effects

- Growth aspirations won't be fulfilled if stop being competitive with public transport/taxis

- Can use diversion ratios to assess change in pricing effects within a GUPPI framework

Consumers say they would substitute to other modes if their preferred service put prices up 10%

Legend: Yandex users, Uber users, Gett users

Categories: Subway/shuttle train, Bus/trolleybus/tram, car sharing services, Private car, Yandex Taxi, Uber, Gett, Official taxi service, Unlicensed cab, Walking, Other, I would not have made that trip

Consistent with growth of ridesharing and "natural experiments"

Legend:
- 20-40% Decrease
- 10-20% Decrease
- Up to 10% Decrease
- Up to 100% Increase
- 100-300% Increase

3. If there is time… challenges in defining markets and assessing competitive constraints

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Understanding channels of competition in digital

Multiple products/ services sold to consumers in multiple different ways, within a "stack" of services	**… with contractual relations not seen before…**	**…and various business models with multiple forms of monetisation…**

- Search
- Product information
- Product sampling
- Distribution format
- Consumption formats
- Bundles
- Complementary offers …

- Multiple alternative contract structures with customers

- …Including "zero" prices for certain services, as paid for by "the other side" of the platform

Measuring substitution is harder, so typical fall-back on narrow separate markets based on the *function* the user performs on the platform

…search / compare / social networking / buy…

Harder to think about *substitution in these structures…*

Challenge 1: Substitution in a world with zero prices

Challenge 2: Substitution between competing business models

Challenge 3: Two-sidedness & competition for platform engagement

Challenge 1: Substitution in a world with zero prices

Multi-sided business models tend to adopt **asymmetric pricing strategies:** lower price on the "more elastic" side to draw in more users that can be monetised on the other side. Combined with practical restrictions to charge *negative* prices, this means **user-side prices have a tendency to "bunch" at zero**.

Search engines, social networks, price comparison sites all have zero prices on user side

Challenges to applying a SSNIP test when there is **no variation in price:** how does one measure *substitution to relative price changes?* How to avoid the *Cellophane Fallacy*?

An equivalent test could be formulated in terms of **quality:** can a hypothetical monopolist impose a **Small but Significant Non-transitory Decline in Quality**?

SSNDQ test

Example: would a monopolist in search find it profitable to change to induce changes to the search engine results page (SERP) that increase monetisation of the page at the expense of showing information less relevant to the users query. Or will that be defeated by consumers switching? HARD TO DO

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Challenge 2: Substitution between competing business models

Digital products do not neatly "replace" one another. Consumers' goals may be achieved through combinations of services which differ in their *technical characteristics, vertical structure and monetisation strategy…*

Analysis cannot restrict attention ex ante only to competition "within a format" or at each "level" of this stack of services
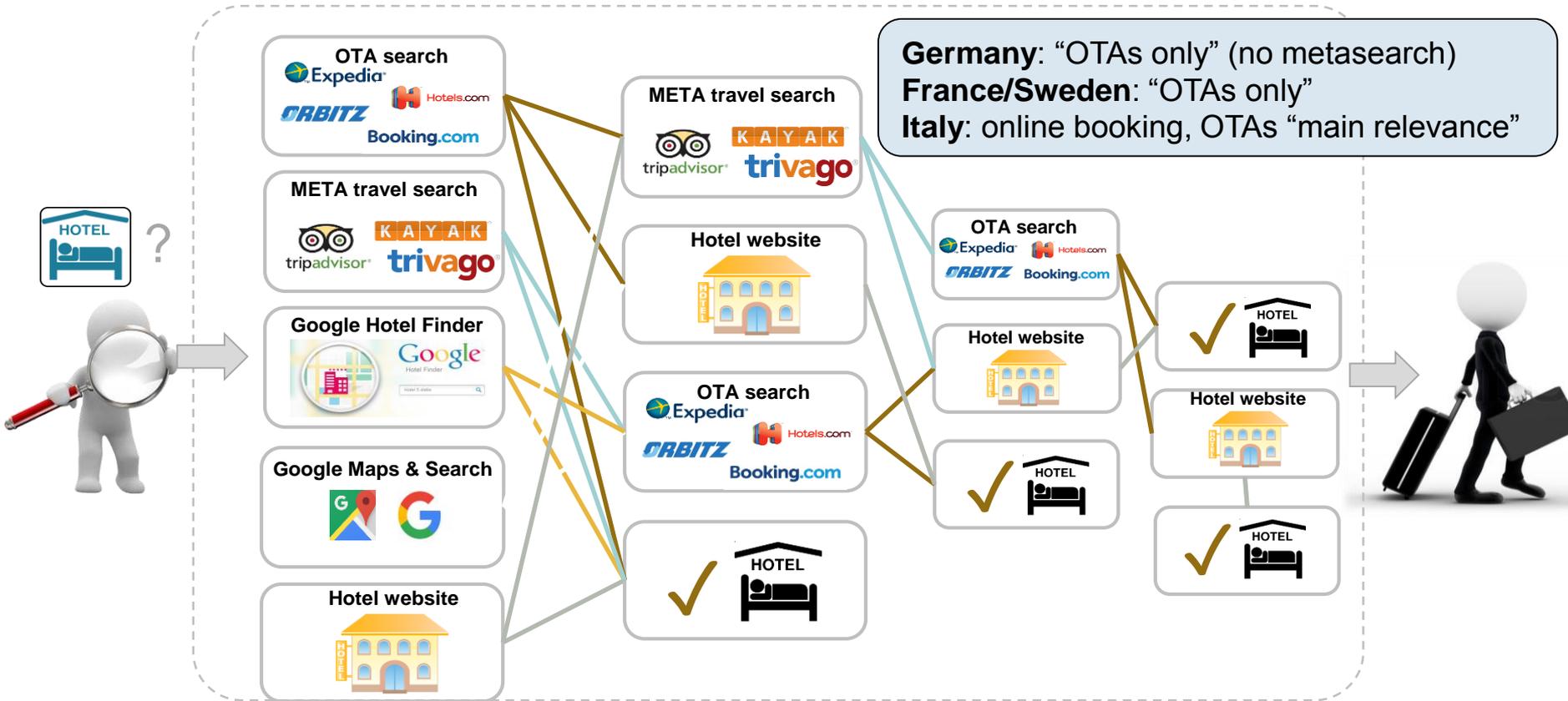
Even a monopolist on a single component of the stack is constrained by the alternatives if consumers have very different ways to achieve the same goal

(But very broad definitions are not the solution either! *)

* e.g. Google have pointed to fact that a large proportion of consumers shopping online begin their search at Amazon, not Google. This does not tell us anything about the substitution patterns of those who do use Google and hence the competitive constraints Google faces
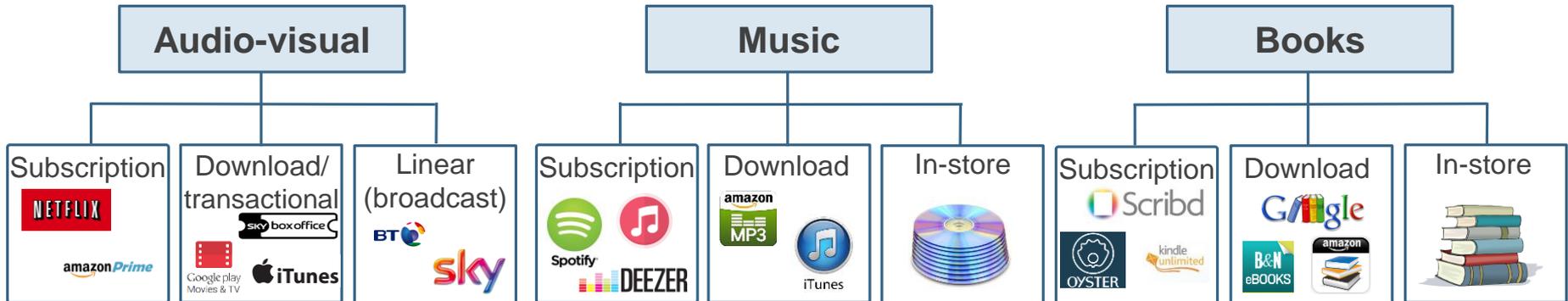
Example: separate market for OTAs?

"Online travel agents" = *searching + comparing + booking on the same site*. Is it a *market?*

Germany: "OTAs only" (no metasearch)
France/Sweden: "OTAs only"
Italy: online booking, OTAs "main relevance"

Cannot assume integrated offer unconstrained by "dis-integrated" offers: consumers implicitly multi-home and this changes the competitive interaction

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Examples: music, books, audio-visual content…

Audio-visual				Music				Books		

Audio-visual
- Subscription: NETFLIX, amazon Prime
- Download/transactional: sky box office, Google play Movies & TV, iTunes
- Linear (broadcast): BT, sky

Music
- Subscription: Spotify, iTunes, DEEZER
- Download: amazon MP3, iTunes
- In-store

Books
- Subscription: Scribd, OYSTER, kindle unlimited
- Download: Google, B&N eBOOKS, amazon
- In-store

"Different markets" for **download vs subscription** services?

Subscription is priced to compete with download, but again: hard to do "substitution analysis" around price responses

- *Price structures difficult to compare*. Highly non-linear pricing, embedded in complex structures.

- *Zero prices for some products*

- *Price variation is not often there to do the analysis properly*

Challenge 3: Two-sidedness & competition for platform engagement

Ad-funded Platforms set low/zero prices for users with aim to **attract "eyeballs" of interest to advertisers and package them into tradable demographics**

So even if different platforms "do different things" for consumers, they all want to *generate interest and increase engagement on consumer side to get advertising*

Competition for advertising. As long as consumers multi-home, even very different services (e.g. Youtube and Facebook) are in competition for advertisers

But is there also broader competition for "attention"? Advertiser-side competition may understate competitive interaction if even v different sites are competing with one-another for consumer attention/engagement. *(David Evans: "presumption that attention seekers compete with each other, at least to some degree, across even broadly defined products and service categories")*

Don't go overbroad: but still need to understand new type of substitutability that is generated by the <u>interaction of product and platform substitutability</u>

Wrong default! Functional definitions

Complexity in applying substitutability-based approaches means **the default becomes a "functionality-based" approach:** pointing to differences in the set of functions offered and business models as "evidence" for separate markets

Example: "horizontal" search engines, e.g. Google and Bing, "crawl" the whole internet for information – while "vertical" search engines, e.g. Tripadvisor, Kelkoo or Yelp, use different approaches to gathering the information they display to users (structured datasets on specific topics).

Google
bing VS tripadvisor
kelkoo
yelp

Example: meta search services like Trivago don't offer final purchase functionality so OTAs are deemed distinct because they are the only service which provides a single destination to search, compare and book.

trivago
VS Expedia

=> *Functional differences are a source of differentiation but do not in themselves show lack of substitutability*

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