

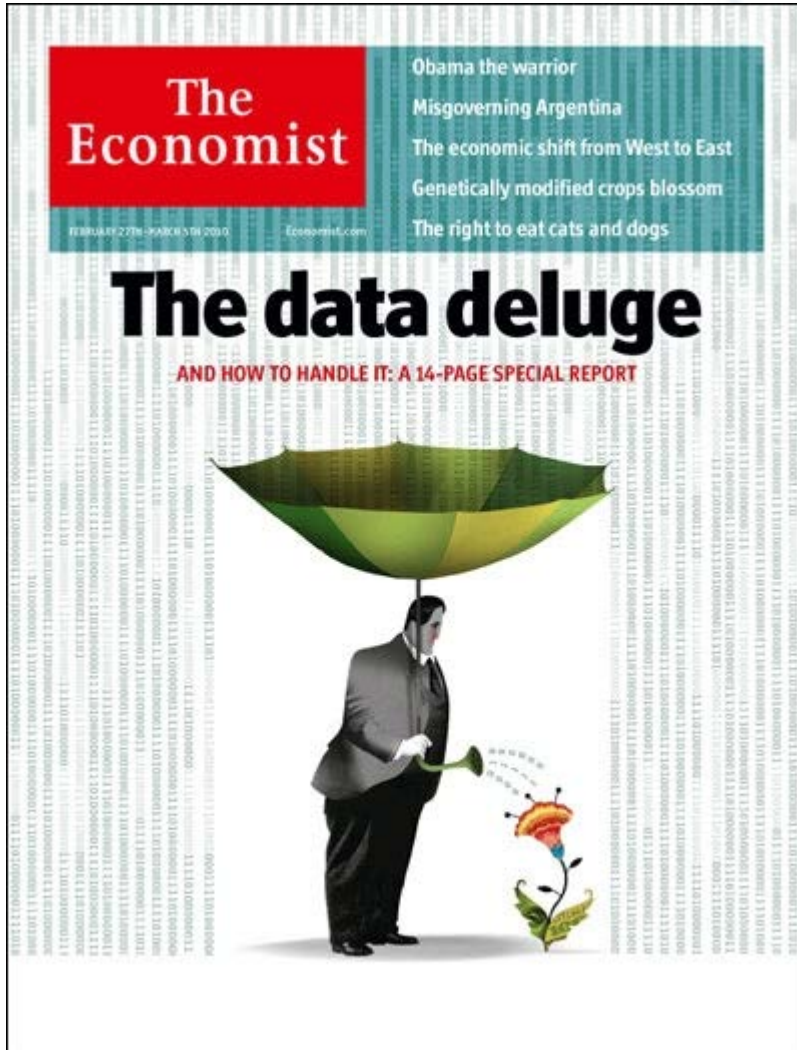
Regional Forum on Emergent Technologies

Big Data: a Competition Perspective

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Increasing “datafication”* of activity



The Economist, Feb 25th 2010

“Where is the Life we have lost in living?
Where is the Wisdom we have lost in
knowledge?

Where is the Knowledge we have lost in
information?”

T. S. Eliot, The Rock

*Datafication: a term coined by By Kenneth Neil Cukier and Viktor Mayer-Schoenberger back in 2013

Big Data

“Big data starts with the fact that there is a lot more information floating around these days than ever before, and it is being put to extraordinary new uses. **Big data is distinct from the Internet, although the Web makes it much easier to collect and share data.** Big data is about more than just communication: the idea is that we can learn from a large body of information things that we could not comprehend when we used only smaller amounts.”

Source: Kenneth Neil Cukier and Viktor Mayer-Schoenberger, "The Rise of Big Data". Foreign Affairs (May/June): 28–40, 2013



Online platforms

- Online platforms are at the heart of Big Data, but so Walmart is. So why are we speaking about Google, Facebook or Amazon?
- Among other players, online digital platforms play a disruptive role in the economy:
 - transforming the economics of many business and reshaping markets by exploiting indirect network effects,
 - reducing transaction costs, and
 - harnessing technological innovations such as **Big Data** analytics and self-learning algorithms.
- For certain types of platforms consumers can get services “for free” and in return allow their data to be sold to advertisers.

Network effects

Cross-group effects

Users experience a higher value if there are more participants on the other side of the platform
(e.g. to allow them to use a payment mechanism)

Users experience a lower value if there are more participants on the other side of the platform
(e.g. they may dislike advertising)

Within-group effects

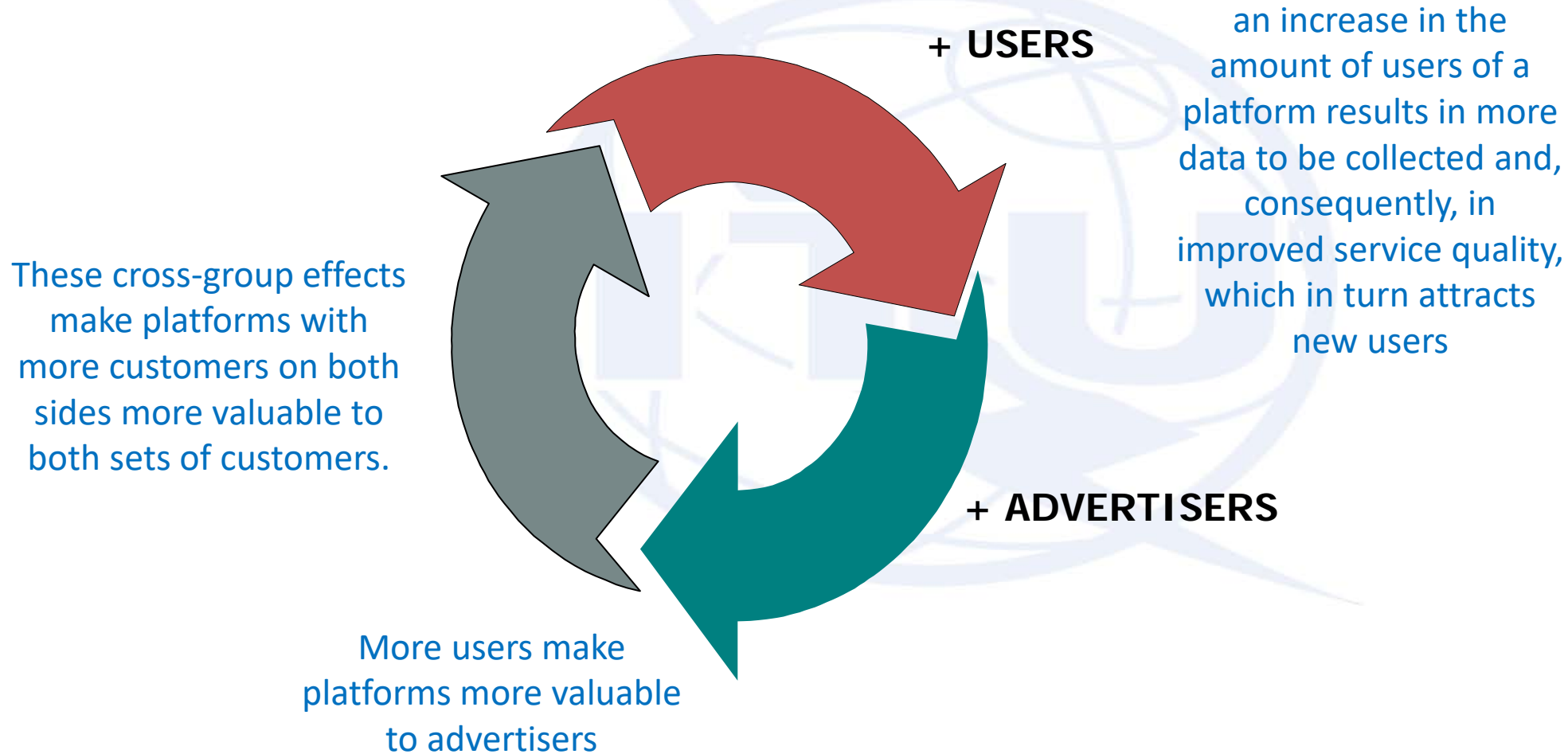
Users experience a higher value if there are more participants on the same side of the platform
(e.g. they like all their friends to be on the same social media platform)

Users experience a lower value if there are more participants on the other side of the platform
(e.g. bidders for these goods on internet auction websites experience more competition)

Positive

Negative

The more data they get, the better



Market concentration has caught attention

	Global market share April 2018 (%)	Business activity
Google	90	Search
Facebook	66	Social media
Apple	45	Smartphone web traffic
Amazon	37	Online retail

This feedback loop, associated with network effects promotes larger and fewer competing platforms

Source: The Economist 30th June 2018, "Fixing the Internet", based on data from Global Stats Counter

Contestability

- Online platforms typified by economies of scale and strong network effects (whether direct or indirect) can make it particularly difficult for rivals to enter and challenge the position of the platform effectively.
- As a consequence, such markets tend towards concentration and can even “tip” in favour of one platform in the sense that the winner takes all.
- In theory monopolies are ok if they can be contested

Big Data and Competition

- Is Big Data creating an insurmountable competitive advantage? When can we say that a “BIG DATA” advantage is at play?
- Is the access to data a barrier to entry? To what extent can companies monopolise data and use it to exclude rivals?
- Is it about the data or rather the ability to analyse it?
- Is the data replicable or available from other sources? Does it experience decreasing returns?
- How quickly does the data become outdated?



Barriers to entry

- This tendency towards monopoly stimulates intense rivalry in the form of dynamic competition for the market as distinct from static competition within it.
- But entry usually concerns a market segment: Amazon began as an online bookseller, Facebook challenged Myspace in the social network segment and Google replaced Alta Vista in the search engine market
- At the time of entry none had probably a lot of data

Big Data will not create market power

- Network effects may be also beneficial to new market entrants if they are able to enter and attract a high number of users for other reasons e. g. because of an innovative feature.
- They also argue that data is cheap and non-rivalrous (because users multi-home).
- And that the costs of collecting and analyzing Big Data are decreasing (outsourcing), that Big Data is increasingly available since the sources become more widespread such as for example with the development of the Internet of Things.

Innovation is not enough

- The value of the data collected is not absolute. It depends on the amount of the data a company already has. Because more data improves the results of algorithms (increasing non linear returns to scale).
- Companies which amassed huge amounts of data disclose algorithms but don't give access to data. Therefore the role of data is context specific.
- Firms still pay considerable amounts for data access.

Data ended up being spotted

- Back in 2016 a joint study of French and German Competition authorities* noted **Big Data** as a **Competition** issue:

“The collection, processing and commercial use of data is often seen not as a competition law issue but rather as an issue which concerns data protection enforcement. However, several recent proceedings point to the fact that competition authorities have begun to look at possible competition issues arising from the possession and use of data, even if, in the end, none were ascertained in the specific cases”

* AUTORITÉ DE LA CONCURRENCE; BUNDESKARTELLAMT. Competition Law and Data. 2016.

Product line extension

	Google worldwide market share 2017 (%)
Search	90
Mobile operating System (Android)	72
Web browser (Chrome)	51
Online advertising	41
Email client (Gmail)	23

Source: The Economist 21st July 2018, "Antitrust theatre", based on data from Litmus, StatCounter, Statista

Addressing the "data advantage"

- In the Facebook/WhatsApp merger*, the European Commission determined:

“For the purposes of this decision, the Commission has analysed potential data concentration only to the extent that it is likely to strengthen Facebook's position in the online advertising market or in any sub-segments thereof.

Any privacy-related concerns flowing from the increased concentration of data within the control of Facebook as a result of the transaction do not fall within the scope of the EU competition law rules but within the scope of the EU data protection rules.”

* Source: Facebook/WhatsApp (Case Comp/M.7217), Commission Decision C(2014) 7239 final, 3 October 2014

Conclusion

- Harm to consumers has been hard to prove but excessive concentration and dominance is a legitimate concern. More regulation and competition authorities scrutiny is therefore likely
- A number of remedies are still being debated among practitioners on how they could be applied to online platforms; some involve data issues beyond privacy:
 - Blocking new mergers or mandating spin offs
 - Limiting large online platforms from offering certain services
 - Imposing data access
 - Reverse the burden of proof



Thank you

