



Shaping competition policy in the era of digitisation

Facebook's observations

30 September 2018

Introduction

Facebook welcomes the opportunity to provide its insights and observations in response to the European Commission's (the "*Commission*") call for contributions addressing the implications of digitization for competition policy.

Facebook's observations are based on its experience and view of the competitive dynamics in the digital economy and are provided with the aim of assisting the Commission's panel discussions to be held on 17 January 2019.

1. Facebook is part of a fast-paced and dynamic industry characterized by disruption and innovation

Competition in digital and online spaces is fast-paced, multi-faceted, and continuously evolving, with low barriers to entry and where multi-homing is commonplace across a range of digital products and services. Existing competitors - some of which began as disruptors themselves - operate under constant threat that a new entrant with an innovative idea will win over at least some of their users.

These competitive dynamics constantly push companies to innovate and experiment with new ideas and approaches, and it has consistently yielded new business strategies and models that have disrupted established incumbents to the benefit of consumers.

In the past 15 years alone, new startups with innovative ideas have disrupted the sectors in which they compete, and fundamentally changed the landscape in which consumers use their services. Spotify, Deezer, Uber, Airbnb, Zalando, Deliveroo, Netflix, YouTube, and Skyscanner to name just a few, have disrupted traditional industries such as transportation, e-commerce, food, music, travel, retail and entertainment. The growth and success of each of these companies is evidence of the value of digital services to consumers.

Facebook is an example of an online platform that has provided considerable value to consumers by offering a broad range of innovative services that enable people to connect, communicate, and share with their friends, families and wider communities, and discover meaningful and relevant content. Facebook provides nearly all of these consumer services free of charge.

Facebook's core value to consumers comes from the highly personalized experience it provides. Unlike a magazine one buys, a store one visits, or a website or app that shows the same things to everyone, the experience on Facebook is tailored specifically for each person. Each time someone visits the Facebook website or opens the app, Facebook tries to show that person things that may be most interesting and relevant to them based on their interests and actions.

Facebook constantly invests in improving the user experience to stay relevant. If Facebook did not, users would leave and go elsewhere to one of the numerous online and offline alternatives that people use to connect, share, communicate, and discover. The key dimension of this competition for user engagement is typically not price, but rather service, quality, and innovation.

The services that Facebook provides for free to users are supported by the sale of advertising. Facebook makes it possible for businesses of all sizes to connect with customers locally, nationally, and globally, through advertising and that advertising service has enabled a whole new generation of entrepreneurs and small and medium-sized businesses, who might previously have struggled to

afford newspaper or TV ads, to reach a national or even global audience affordably. Worldwide, over five million businesses, the vast majority of which are small businesses, now advertise with Facebook regularly.

2. Facebook competes vigorously to attract people and advertisers to the platform

As a multi-sided platform, Facebook competes on multiple axes. On one side, Facebook competes with a wide variety of services to provide users with products and services that allow them to connect, share, communicate, and discover. On another side, Facebook competes with many of these same companies and numerous other online and offline channels for advertising revenue.

That dynamic is important for competition analyses because the economic principles governing how firms compete in single-sided markets differ in important ways from the principles that govern multi-sided platforms. First, multi-sided platforms connect distinct groups that interact with each other through the platform. Second, interactions between the distinct groups can create cross-platform effects, whereby the actions of participants on any side of the platform, or of the platform itself, affect participants on one or more of the other sides of the platform (or the functioning of the platform itself).¹ These differences must be taken into account when applying competition law to markets involving multi-sided platforms.

The cross-platform dynamics can be positive or negative. A positive effect occurs when “*the value that a customer on one side realizes from the platform increases with the number of customers on the other side.*”² A negative effect reflects the inverse - when the multi-sided platform becomes less popular to all sides because membership on one side decreases. Unlike single-sided firms, a multi-sided platform must balance the interdependent demands of all its distinct customers.³

In more practical terms, a strategy designed to increase short-term revenue at the expense of consumer engagement / satisfaction might risk triggering a negative feedback loop that could have serious consequences for a platform in the long term. Critically, this tends to align the interests of the platform with the interests of the people using the platform. This risk of alienating users and seeing cascading losses is real and when it happens, there is no shortage of rivals poised to take advantage of such missteps. Myspace, for example, was perceived as bombarding its user base with advertisements in pursuit of short-term profits. This perception made the service less popular for users, and subsequently less popular for advertisers.

Those platform dynamics are not necessarily accounted for by certain economic tools that regulators have traditionally used to define the markets within which to examine competition and conduct.⁴ For example, the Significant Non-Transitory Increase in Prices test looks to the loss in sales that would make a small price increase unprofitable and for a single-sided firm, this test only needs to account for losses from one group of customers (e.g., Side A). However, on a multi-sided

¹ See, Secretariat, *Executive Summary*, in POLICY ROUNDTABLES: TWO-SIDED MARKETS 11, 11 (Organisation for Economic Co-operation and Development Competition Committee, 2009) (OECD Paper); see also, e.g., David S. Evans & Richard Schmalensee, *The Industrial Organization of Markets with Two-Sided Platforms*, 3 COMPETITION POL’Y INT’L 151, 152 (2007).

² See, David Evans, *Background Note*, in POLICY ROUNDTABLES: TWO-SIDED MARKETS 23, 29 (Organisation for Economic Co-operation and Development Competition Committee, 2009)

³ The different sides of a platform are interdependent to the extent their decisions affect each other, even indirectly. See, e.g., Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668 (2006).

⁴ See, David S. Evans & Michael Noel, *Defining Antitrust Markets When Firms Operate Two-Sided Platforms*, 2005 Colum. Bus. L. Rev. 667, 699-700 (2005).

platform, a shift in pricing strategy on Side A of the platform runs the risk that participants on that side of the platform disengaged and that may, in turn, impact the second side (Side B) of the platform.⁵ The impact on Side B can loop back and increase the negative impact on Side A. Such a negative feedback loop results in losses to all sides of the multi-sided platform, even if the magnitude of these losses are asymmetric in their strength.⁶ Accordingly, understanding the multi-sided nature of the competition faced by a platform is critical to understanding not only the competitive constraints that it faces but also to analysing the conduct (if any) that may be under scrutiny.⁷

In terms of the multi-sided nature of competition, Facebook faces strong competition for both users and advertisers as described, in turn, below.

A. Fierce competition to provide products and services that users want to engage with

Facebook is just one of the ways Europeans connect with friends, family, and the world around them. The ever-decreasing cost of high-speed Internet connectivity, processing power, the often zero price nature of the services and storage space on devices means that people do not need to be selective - they can easily switch between services, add new ones, or combine them to perform identical or similar functions.

The ease with which people can move between different apps creates strong competitive pressure on every product and service Facebook offers - as well as pressure to develop new functions to attract and retain users.

Online platforms seek to engage users in different ways, offering numerous features, products, and services that are constantly evolving and that defy simple categorisation. For example, YouTube started as the video dating site with the slogan, “*Tune In Hook Up*” but the service quickly pivoted and expanded as it became the product that it is today.⁸ Similarly, Flickr, started as “*Game Neverending*,” which was a multiplayer online roleplaying.⁹ Each of these services commands the time and engagement of users and competes with us.

In addition, multi-homing between these apps is commonplace. For example, Pew Research recently found that 87 percent of Americans on Facebook also use YouTube, over a third also use Pinterest (37 percent) and Snap (35 percent) and just under a third also use LinkedIn (33 percent) and Twitter (32 percent).¹⁰ Due to multi-homing and the widespread use of mobile devices that allow for easy download of and switching between apps, people can easily spread their limited time across more platforms than ever before. So irrespective of whether a particular platform’s products and features may (or may not) be identical to any of those offered by another platform,

⁵ See, *id.*, at 700.

⁶ See, *id.*

⁷ The threat of triggering a negative feedback loop constrains how multi-sided platforms operate, a constraint not present for single-sided firms. Evans & Noel, *supra* note 4, 671 (2005) (stating that feedback loops in multi-sided platforms “may provide an economically important constraint” with respect to market definition).

⁸ See, Stuart Dredge, *YouTube was meant to be a video-dating website*, The Guardian (16 March 2016), available at: <https://www.theguardian.com/technology/2016/mar/16/youtube-past-video-dating-website>

⁹ See, Kaden, *Fun Fact: Flickr and Slack Started as “A Game that Never Ends”*, Jumpstart (21 September 2017), available at: <https://jumpstartmag.com/fun-fact-flickr-and-slack-started-as-a-game-that-never-ends/>

¹⁰ See, Pew Research Center, *Social Media Use in 2018* (1 March 2018), available at <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>.

the two may well compete by seeking to draw users (or a portion of user engagement) away from each other and that dynamic has implications for the approach of competition policy to fundamental questions such as market definition and competitive effects analysis.¹¹

Any platform that competes in this space knows that if it ceases to provide a service that users find valuable, people will leave or disengage. If that platform does not adapt continuously to people's demands and expectations - both with regard to the user experience and in terms of security, and other factors - people will migrate to other services.

B. Fierce competition for advertising revenues

All advertising is based on having an engaged audience. For an ad to be effective, people have to see or hear it. This is true across all forms of advertising.

Companies, big and small, have more options than ever before when it comes to advertising—from billboards, print and broadcast, to newer digital platforms like Facebook, Amazon, Google, Twitter, YouTube, Snap, Bol, Zalando or Skyscanner. Unlike 40 years ago, when companies were largely limited to print, TV, radio or billboards, today there are numerous different advertising channels and platforms, and hundreds of companies offering each of them, all competing for people's engagement and advertisers' budgets. And the data shows that advertisers do spread their budgets across multiple outlets and channels¹² which means that in 2017 Facebook represented approximately 6% of this diverse and expanding global advertising ecosystem.¹³

This sector is incredibly dynamic, with advertisers constantly reallocating budgets to platforms where people choose to spend their time. Amazon is estimated, for example, to have more than doubled its ad revenues last year,¹⁴ while broadcasters and publishers are increasingly adopting more effective targeting services.¹⁵ Similarly, Rakuten has just announced the launch of its advertising platform in France and expects to treble its advertising revenues there next year.¹⁶ All of this illustrates that companies with different user-facing value propositions nonetheless compete fiercely for the same advertising revenues.

¹¹ See, e.g., David S. Evans, *Attention Rivalry Among Online Platforms*, 9 J. COMPETITION L. & ECON. 313, 314 (2013) (“Antitrust analysis should . . . focus on competition for securing and delivering attention in considering market definition, market power, and competitive effects. Focusing on competition between specific products and services, rather than attention, could result in competition authorities and courts making either false-negative or false-positive errors in their decisions.”).

¹² According to one estimate, an average \$100 of advertising spend is divided up between a range of different advertising mediums, with \$35 spent on television, \$12 on print, \$6 outdoor, \$6 on radio, \$6 on ad networks (like Criteo, Taboola, Oath, Facebook or Google), \$24 on “digital properties” (like Facebook, Google, BuzzFeed or Amazon), and \$11 on agencies or third parties. See Matt Schruers, Disruptive Competition Project, *Infographic: How Ad Dollars Are Spent* (16 January 2018), available at <http://www.project-disco.org/media/011618-how-ad-dollars-are-spent/#.WsPIM9Pwa9Y>.

¹³ Based on International Data Corporation statistics.

¹⁴ See, Martin Sorrell, *How Amazon will crash Google and Facebook's advertising duopoly*, Wired Magazine (2 January 2018), available at <http://www.wired.co.uk/article/amazon-advertising-threaten-google-facebook>; Aurore Dermagne, *La pub en ligne, nouvel eldorado d'Amazon*, Le Figaro (24 July 2018), available at: <http://www.lefigaro.fr/medias/2018/07/24/20004-20180724ARTFIG00226-la-pub-en-ligne-nouvel-eldorado-d-amazon.php>

¹⁵ See, *C4 invests in European Broadcaster Exchange as exclusive UK partner* (13 November 2017), available at: <http://www.channel4.com/info/press/news/c4-invests-in-european-broadcaster-exchange-as-exclusive-uk-partner>

¹⁶ See, Stéphanie Marius, *Rakuten lance sa régie publicitaire en France*, ecommercemag.fr (17 September 2018), available at: <http://www.ecommercemag.fr/Thematique/marketing-1221/Breves/Rakuten-lance-propre-regie-publicitaire-333749.htm#wIHj2KyJMmWO2dYf.97>

3. Low barriers to entry allow new entrants to compete effectively with established competitors

The online space is a fiercely competitive environment characterized by innovation, frequent entry and explosive growth. Competition from established digital platforms and new entrants forces all players to innovate continuously and provide new and better products and services.

Constant new entry is a feature of the online space because the barriers to entry for online services are low. The products offered are typically software-based, which means they can be rolled out, adopted, and built upon much more quickly (and cheaply) than industrial products. A new mobile app requires minimal staff, capital investment, and infrastructure. The rise of cloud-computing platforms hosted by Amazon Web Services, Microsoft Azure, Google Cloud Engine, and others has dramatically decreased the time and capital necessary to start and scale an online service. Moreover, app stores run by Google, Apple, Microsoft, and Amazon (among others) provide pre-existing distribution platforms for applications to reach users and scale quickly.

On the consumer side, the ease of multi-homing and low or zero pricing enable people to try out and adopt new apps quickly and easily. And these factors all make it easier for new services to compete with established products on the merits, and to do so quickly. This constant competition has led to a high rate of churn among the most popular online services.¹⁷

Low barriers to entry mean that new competitors can quickly challenge established players. Snap, for example, has grown into a significant player that competes with longer-established online platforms.

These low barriers to entry also mean that online platforms must innovate constantly, and it underscores that online platforms are not insulated from competition because of network effects.¹⁸ In today's digital economy, "[t]he underlying technology, and business models, facilitate entry and enable firms, with the right formula, to attain global scale quickly, and to challenge incumbent platforms in one or more dimensions."¹⁹ As a result, "all online platforms, no matter how secure they may seem, [are forced] to keep innovating and providing value to users. And each needs to worry about other successful platforms in addition to the proverbial inventor in the garage."²⁰

4. Data does not create barriers to entry

Despite the influx and success of new startups, some commentators have speculated that access to or control of data - whether specific types of data or large amounts of it - may provide established companies with sustainable competitive advantages and/or inhibit the ability of new competitors to enter the industry.²¹

There is good reason to doubt this overly simplistic narrative however. In fact, as numerous examples show, the non-exclusive and non-rivalrous nature of data means that new competitors

¹⁷ See, David S Evans, Attention Rivalry Among Online Platforms, 9 J. Competition L. & Econ. 313, 318-21 (2013).

¹⁸ See, e.g., David S. Evans, *Why the Dynamics of Competition for Online Platforms Leads to Sleepless Nights, but Not Sleepy Monopolies* (last revised 25 August 2017), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3009438

¹⁹ *Id.* at 37.

²⁰ *Id.*

²¹ Anja Lambrecht & Catherine E. Tucker, *Can Big Data Protect a Firm from Competition?*, 4 (2015), available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2705530;

can and do enter the market without possessing large amount of data at the outset or even prior to actually entering.

A. Data is widely available and non-exclusive

As a society, we are producing more data, about more activities, from more devices than ever before, with Deloitte estimating that the amount of data we produce will increase tenfold by 2025.²²

In that context, if a new entrant wants additional data to launch or develop its offering, it has many options, for example by collecting data from users through offering innovative and engaging services or licensing data from widely available data sources.

After all, data is non-rivalrous; the fact that one party possesses some data does not render that same data unavailable to others.²³ An online platform that engages users through an attractive user experience can quickly gather a large audience and information about their activities and interests, even if its competitors have been and are doing the same thing. Recent examples include the rapid rise and success of services like Twitter, Pinterest, Uber, Lyft, Airbnb, and many others. It is common for online companies to collect data on how users engage with their services. This is true for both established and emerging companies, and across mobile and desktop platforms. There are no structural or technological barriers preventing other digital platforms - or other companies - from collecting any of the data that another firm may also collect.²⁴

And, as noted above, companies do not need identical datasets to compete. Amazon, Google, Twitter, Microsoft, Oath, Facebook, and others each collect different data, but are direct competitors for providing products which people wish to engage with and advertising revenue.

B. Possession of large amounts of data, in and of itself, provides limited returns

Data does not, in and of itself, confer a competitive advantage. Value is created when the relevant data is analyzed in order to bring about a desired result (e.g., making predictions about what product would be popular or which users may be interested in certain advertisements). And although the predictive power of data analysis can increase with the amount and quality of available data, there are diminishing returns to scale that must also be considered.²⁵ As professors Anja Lambrecht of the London Business School and Catherine Tucker of MIT have found, “*by itself, big data is unlikely to be valuable. It is only when combined with managerial, engineering, and analytic skill in determining the experiment or algorithm to apply to such data that it proves*

²² See, *The data landscape*, Deloitte report (November 2017). Available at: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/technology-media-telecommunications/deloitte-uk-tmt-the-data-landscape.pdf>

²³ See, Lambrecht & Catherine E. Tucker, *supra* note 21, at 5.

²⁴ See, Steve LeVine, *How Old Tech could roar back*, Axios (26 February 2018), available at <https://www.axios.com/big-tech-new-rivals-old-tech-ibm-uber-facebook-1519609801-80daea23-cee2-44bf-ad54-f65336a996c2.html> (discussing study by IBM and Oxford Economics that shows that “incumbents like Unilever, Procter & Gamble, Bank of America and the UK’s Santander own about 80% of the world’s data”).

²⁵ See, *id.* at 10-11 (“For example, it has been shown that to predict preferences for movies, ten movie ratings alone are more helpful than extensive metadata.”); see also Patrick Bajari et al., *The Impact of Big Data on Firm Performance: An Empirical Investigation*, National Bureau of Economic Research, Working Paper 24334 (February 2018), available at <http://www.nber.org/papers/w24334>.

*valuable to firms.*²⁶ A start-up with a sophisticated data algorithm can draw out more useful conclusions from data than a pre-existing competitor with larger amounts of data.

C. Given data is widely available, it is important to have strong privacy protections

Facebook agrees with lawmakers and other stakeholders across Europe that data protection is important. The General Data Protection Regulation (the “GDPR”), which entered into force on 25 May 2018, has put in place strong enforcement measures that hold companies accountable.

Recently, there has been some debate as to the extent of the overlap between data protection laws and regulation and competition laws. While both frameworks are very important, they ultimately pursue very different aims and should not be treated as substitutes.²⁷ The GDPR, for instance, applies to everyone across Europe because people deserve to have their data protected, regardless of the size of the company they’re dealing with. If data protection laws were to be viewed through the prism of competition law concepts such as market power, there is a risk that privacy protections would be inconsistently applied and unevenly available. Having different requirements for large and small companies, for example, would undermine the protection that policymakers intended when they created the GDPR.

5. Conclusion

The rapid pace of innovation and technological change over the past two decades has changed how people communicate, discover and share, how businesses connect with their customers, and how advertisers promote their brands and products. Today there is more reason than ever to believe that constantly accelerating technological changes - such as the advent of the Internet of Things, virtual reality and the increasing prevalence of digital assistants - will present dramatically different challenges and opportunities for companies and start-ups.

This kind of dynamism is attracting significant investment from a wide range of actors, including venture capital funds. As a sign of the confidence in the growth and innovation in the tech sector, it attracts approximately 35% of global venture capital investments and is among the deepest and amongst the fastest growing sectors in terms of venture capital investment.²⁸ In fact, access to funding for tech start-ups has never been easier with companies such as Delivery Hero – a Berlin-based online food delivery service – receiving over USD2.6 billion in funding over 15 rounds being just one notable example.²⁹ That level of financial investment is rooted in a strong belief that there are further new entrants expected and stands as further evidence of the dynamism of the industry.

The dynamic nature of competition in the digital and online space has created significant challenges for some incumbents but has also delivered substantial opportunities and benefits for consumers and businesses alike. These benefits will continue as companies across the digital

²⁶ See, Lambrecht & Tucker, *supra* note 21, at 11.

²⁷ See, *CPI Talks...with Thomas Kramler*, CPI Antitrust Chronicle (August 2018), available at:

<https://www.competitionpolicyinternational.com/wp-content/uploads/2018/09/CPI-Talks-Kramler.pdf>

²⁸ See, *Assessing The Impact Of Big Tech On Venture Investment*, Oliver Wyman (July 2018), available at:

<https://www.oliverwyman.com/our-expertise/insights/2018/jul/assessing-the-impact-of-big-tech-on-venture-investment.html>

²⁹ See, *Delivery Hero overview*, Crunchbase, available at: <https://www.crunchbase.com/organization/delivery-hero#section-overview>

landscape respond to changing consumer demands by innovating and improving the products and services that they offer.

In such a landscape, competition law has a role to play if there is specific and serious evidence about likely or actual harm to competition. However, authorities should be careful that any interventions are necessary, evidence-based and do not harm a highly dynamic industry which generates considerable efficiencies and consumer benefits.