“Shaping competition policy in the era of digitisation”

CCIA¹ Input to DG COMP’s Call for Contributions

Introduction
CCIA welcomes this opportunity to contribute to DG COMP’s reflection process on competition policy in the digital era. Competition policy has stood at the centre of our trade association’s work for more than 45 years and we look forward to sharing our industry’s experience and perspective in this contribution and in other future opportunities. While our membership includes many of the world’s most popular and successful companies in what is commonly referred to as the ‘digital economy’, regulators should refrain from artificially drawing borders between the digital and the traditional economies. Neither companies nor consumers operate in a ‘digital economy’ - we live in a dynamic economy that is digital. ‘Traditional industries’ are rapidly becoming more digital and transforming into data-driven markets. This has important implications for competition enforcers especially.

Topic 1:
COMPETITION, DATA, PRIVACY, AND AI. In a world of ubiquitous data, thanks to, for example, 5G, the Internet of Things and connected cars, where would we have data bottlenecks – or, conversely, data access, data sharing or data pooling – causing competition issues? In which ways should privacy concerns serve as an element of the competition assessment? Since data is the raw material of artificial intelligence, how do we ensure that AI technology is as competitive as possible?

1. Data and the Competition Assessment
In recent years some have made the argument that the mere accumulation of data by consumer-facing technology companies raises antitrust concerns. Based on the notion of an

¹ The Computer & Communications Industry Association (CCIA) is a non-profit membership organisation that represents the interests of a wide range of companies in the Internet, technology and telecoms industries. We advocate for open markets, open networks and full, fair, and open competition. Our full membership can be viewed here: http://www.ccianet.org/about/members/
endless, positive feedback loop, the argument states that the more data is collected, the better companies’ products become which in turn attracts more users who allow for even greater data collection. The end result of this process is a supposedly insurmountable data advantage keeping companies immune from competition. It is true that data may well enable a company to improve its products if it knows how to derive meaningful insights from it. That, however, can hardly be a competition concern. After all, more competitive companies finding new ways to better meet the demand of their customers is precisely what competition policy aims to encourage.

In fast-moving technology markets data as such has never given and will never give an online company an insurmountable competitive advantage. Apart from data often being available in the marketplace, that is primarily because of its key economic characteristics: it is non-rivalrous, subject to diminishing returns\(^2\), and its value depreciates over time considerably. As renowned economists Catherine Tucker and Anja Lambrecht note:

“Our analysis suggests that big data is not inimitable or rare, that substitutes exist, and that by itself big data is unlikely to be valuable. There are many alternative sources of data available to firms, reflecting the extent to which customers leave multiple digital footprints on the internet. In order to extract value from big data, firms need to have the right managerial toolkit. The history of the digital economy offers many examples, like Airbnb, Uber and Tinder, where a simple insight into customer needs allowed entry into markets where incumbents already had access to big data. Therefore, to build sustainable competitive advantage in the new data-rich environment, rather than simply amassing big data, firms need to focus on developing both the tools and organizational competence to allow them to use big data to provide value to consumers in previously impossible ways.”\(^3\)

It is worth to highlight two aspects raised by the economists. First, rather than facing a ‘data bottleneck’, companies are faced with a ‘talent bottleneck’. The key to gaining a competitive edge is not data as such but the capacity to analyze and monetize data. In other words, human talent is the main ingredient to successfully compete in technology markets. Second, the company examples show that data cannot be considered as a barrier to entry. In general, the relatively short history of the Internet does not show any evidence of large amounts of data being an effective wall for fending off competition.\(^4\) The most obvious answer to the question how small competitors can compete with bigger, more data-heavy companies is to come up with a better, more innovative, or just different ‘mousetrap’ that

\(^2\) For an interesting study showing how growing datasets are subject to diminishing returns see: Stanford Dogs Dataset, available at http://vision.stanford.edu/aditya86/ImageNetDogs/.


would attract users.\(^5\) Dating app Tinder is a very good example for how a company could successfully break into a market that until then used to be extremely data-heavy. For Tinder, just like for many other innovators, data collection was ultimately the result of success rather than the cause for it.

Until now the existing EU competition law framework seems to have largely accommodated the points raised above. Commissioner Vestager has stated that the accumulation of data does not automatically equal market power.\(^6\) This approach is also reflected in the Commission’s merger decisions. During the Microsoft/LinkedIn\(^7\) merger some argued that LinkedIn might have unique data that companies were not able to replicate. The Commission rightly dismissed this argument and pointed to other data sources readily available to competing companies.

We welcome this approach and call for continued, evidence-based enforcement that takes into account the fiercely competitive online environment. Data should continue to be assessed like any other non-rivalrous asset that companies use to compete in the market. Misguided policy could chill companies’ incentives to invest and innovate.

In addition, we also wish to point to industry-led initiatives like the Data Transfer Project (DTP) designed to ensure data portability across various online services.\(^8\) The aim of the DTP goes much beyond users’ ability to simply download a copy of their data. The project makes sure users can directly transfer their data into and out of any participating provider. In the words of participating companies, this “concept of allowing users to choose products and services based on choice, rather than being locked in, helps drive innovation and facilitates competition”.\(^9\)

2. Privacy as an Element in the Competition Assessment

In the EU there are strong legal frameworks for both, the protection of competition and the protection of personal data and privacy. While both frameworks are very important, they pursue different goals and should not be confused. Competition law and enforcement serve to protect the competitive process. Privacy laws protect individual privacy rights. Usually, there are different authorities, or departments within one authority, tasked with the protection of competition and the protection of privacy rights. When enforcing competition rules in both, an \textit{ex ante} merger context or an \textit{ex post} anti-competitive conduct context, authorities should

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\(^7\) Case M.8124 Microsoft/LinkedIn. Commission decision (6. December 2016) available at: http://ec.europa.eu/competition/mergers/cases/decisions/m8124_1349_5.pdf

\(^8\) Data Transfer Project - Overview and Fundamentals, July 20, 2018. Attached to this submission and available online at: https://datatransferproject.dev/dtp-overview.pdf

\(^9\) Ibid., p. 3.
continue to be guided by the question whether a given transaction or conduct reduces the degree of competition in the market. Non-competition considerations like the protection of privacy should not guide antitrust enforcement. The Commission upheld this approach in the Facebook/WhatsApp merger decision by stating that “[a]ny privacy-related concerns flowing from the increased concentration of data […] do not fall within the scope of the EU competition law rules but within the scope of EU data protection rules”.\footnote{Commission decision in Case M.7217 Facebook/WhatsApp (2014), para. 164. Available at: http://ec.europa.eu/competition/mergers/cases/decisions/m7217_20141003_20310_3962132_EN.pdf} More recently, Commissioner Vestager confirmed this approach in a speech.\footnote{"So I don’t think we need to look to competition enforcement to fix privacy problems." Commissioner Vestager, Competition in a big data world (18 January 2016), see fn. 6.} Back in 2003 the OECD cautioned against using competition enforcement for objectives other than economic efficiency and consumer welfare by stating that the “inclusion of multiple objectives […] increases the risks of conflicts and inconsistent application of competition policy. The interests of different stakeholders may severely constrain the independence of competition policy authorities, lead to political intervention and compromise and, adversely affect one of the major benefits of the competitive process namely, economic efficiency”.\footnote{OECD Global Forum on Competition. (2003). The Objectives of Competition Law and Policy, pp. 2-3. Available at: http://www.oecd.org/daf/competition/2486329.pdf} The UNCTAD secretariat made similar observations in a study dating back to 1995.\footnote{UNCTAD Secretariat. (1995). The basic objectives and main provisions of competition laws and policies. Available at: https://unctad.org/en/Docs/poitd_15.en.pdf}

CCIA fully supports this approach. Just like competition authorities do not use competition rules to enforce e.g. environmental laws, they should equally not use them to enforce privacy law. Adding consumer protection-related privacy concerns into the competition assessment will lead to a much more subjective competition enforcement that would be much less grounded in economic efficiency considerations. For example, it is not clear how a competition authority would balance economic efficiency considerations ‘against’ privacy rights. Even if we discount the practical difficulties, such a balancing exercise should probably not be made in the first place. In addition, every company operating in the EU is already required to abide by very strict privacy and data protection standards. These obligations will always bind companies, irrespective of their market position.

Lastly, the degree of privacy can be a parameter of competition if companies in the marketplace compete by offering e.g. different privacy settings. In this situation, competition authorities should continue to treat privacy as such as a relevant dimension of competition in their assessment and in addition to many other potential factors of competition (such as price, quality, etc.). However, just because privacy protection can be a parameter of competition does not mean that it should be the aim of competition enforcement. A clear separation between competition and privacy regulations should be maintained.

3. Competitiveness and AI Technology

It seems that one could answer the question “how do we ensure that AI technology is as competitive as possible?” from two perspectives. First, one could look at the competitiveness...
of AI technology itself. Second, one could also look at how to ensure that AI technology ultimately functions in a competitive, as opposed to an anti-competitive, manner.

With respect to the former, AI and algorithm-enabled analytics allow businesses to make more intuitive, data-driven decisions, from better matching products and services to consumers, to creating opportunities in education, finance, healthcare, and employment\(^\text{14}\). In particular, these technologies can improve outcomes in the consumer advertising and marketing space, providing consumers with information more relevant to their interests and needs, and increasing the likelihood of a completed transaction. AI is already enabling businesses to place more relevant ads, reduce fraud, and optimize real-time bidding processes.\(^\text{15}\) The potential applications of AI extend beyond consumer advertising and marking, including: improved image recognition; automatic video captioning; expedited content moderation; enhanced medical diagnosis; spam and malware detection and filtering; and better detection of patterns in satellite imagery to improve agriculture and transit. In all of these areas of applicability we currently witness fierce competition as companies race to master, develop and put into practical use AI technology. This is a fundamentally pro-competitive development that public authorities should support. Measures could include opening up publicly held data as well as investing into technical skills and education as AI technology requires highly skilled workers.

With respect to the latter, some have voiced concerns with algorithms being potentially applied in an anti-competitive manner. These concerns primarily relate to the use of algorithms in pricing. In general, firms’ use of algorithms to set prices should be generally seen as an efficient way to increase market competition to the benefit of consumers. It is regular practice for firms to monitor competitors’ prices and adapt accordingly in order to compete. Therefore, the use of price algorithms injects dynamism in the markets as it allows firms to adapt to price changes more rapidly like undercutting their competitors. There is no special characteristic of firms’ usage of price algorithms to compete that elicits changes to the current competition framework. At the same time, the use of algorithms does of course not confer immunity from antitrust law. If companies form and enforce a cartel with the help of algorithms, they continue to be subject to antitrust liability. A world in which ‘intelligent’ algorithms would decide to collude by themselves is science fiction, as also stated by Commissioner Vestager.\(^\text{16}\)

There are also discussions concerning how algorithms can facilitate tacit collusion, i.e., ‘conscious parallelism’, that may result in a lessening of price competition. The legal

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assessment of such conduct has occupied enforcers, courts and academia for decades. Independently of this debate, it is important to remember that just like in the ‘offline world’, tacit collusion facilitated by algorithms would still require certain market and economic conditions to exist. These will usually be a high market transparency, the absence of competitors’ or customers’ reactions, a low degree of product differentiation, and a rather small number market participants. In other words, an oligopolistic market structure would still be the most fertile ground for tacit collusion independently of whether companies use algorithm-based technologies or not. Because of this and given that the alternative would be to regulate prices, the expansion of firms’ pricing algorithms should not automatically raise antitrust concerns.

Dynamic pricing enabled by algorithms allows companies to adapt prices in tune with evolving estimates for the supply and demand for a particular product. This makes markets more efficient and competitive. In addition, the use of algorithms helps firms to allocate resources more efficiently. Ultimately, consumers benefit through increased cost savings.

**Topic 2:**

**DIGITAL PLATFORMS’ MARKET POWER.** The interests of platforms are not always aligned with the interests of their users, which can, as a result of platforms’ market power, give rise in particular to: a) leveraging concerns (digital platforms leveraging their positions from one market to another); and b) lock-in concerns (network externalities, switching costs, better service due to accessibility of data make it difficult for users to migrate to other platforms, and allow platforms to “exploit” their user bases). What should/can competition policy do to address these concerns and how?

1. The Terms ‘Platform’ vs. Multi-sided Business Models

The term ‘platform’ is frequently used in reference to certain Internet-based business models, but usually without any definitional rigor. In lieu of these terms, the concept of ‘two-sided’ or ‘multi-sided’ markets is better substituted for ‘platforms’ when considering competition policy matters. This will also avoid imprecisions and confusion. For example, the Commission’s question claims that the interests of platforms are not always aligned with the interests of their “users”. Given the multi-sided nature of platform business models, which “users” are we talking about? Being precise about this matter and taking into account all the different sides active on a multi-sided platform is fundamentally important for the competitive assessment.

From an economic perspective, these business models, including certain online marketplaces, stock exchanges, dating websites, messaging platforms, and payment networks, enable two or more distinct sets of users to interact with each other, realizing

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gains from such interactions. What characterizes these business models is that there is interdependency of demand between them. In other words, the demand for the platform’s services by each set of users depends on the demand for the platform’s services by at least one other set of users.


CCIA believes that EU and national competition authorities can apply the existing antitrust framework to a large and diverse set of businesses, including both single-sided and multi-sided business models. In doing so, competition authorities should take into account real-world business realities and apply sound economic analysis to its enforcement actions. It is fundamentally important to have a clear understanding of the underlying business models of these complex services. Competition law itself does certainly not have to be adjusted for online players. It has deliberately been constructed in a flexible manner to able to deal with a broad range of companies and their business practices.

The current antitrust framework requires the definition of markets to assess competitive effects and determine whether an antitrust violation has taken place or not. Given the particularities that characterize multi-sided business models, including the extent of inter- and intra-platform competition, it is important that economic analysis informs antitrust authorities’ enforcement decisions. In particular, it is necessary that agencies account for the interrelationship of demand. In addition, competition authorities should be careful with defining markets too narrowly. Online advertising is a good example where online players, at the very least, stand in fierce competition to each other. While they compete to attract ‘eyeballs’ and consequently advertisers, many think of these companies as operating in their own silos, unconstrained by their competitors who target the very same advertising income.

With respect to the Commission’s concerns about ‘leveraging’, it is important to make sure leveraging does not became a catch-all theory of harm that would prevent companies that are allegedly dominant in one market from effectively expanding and improving their products to provide a better user experience. There is a fine line between accusations of abusive leveraging and genuine product improvement. If competition authorities developed a too wide view of ‘leveraging’, they would effectively lock companies into one tightly defined market. The competitive process and ultimately consumers are not served with preventing companies from improving their products. Product development, expansion, and improvement are key characteristics of companies competing on the merits.

On a more general level, digital players have always operated and will continue to operate in a highly dynamic and competitive environment. The is because the online market

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19 See, e.g., Lapo Filistrucchi et al., *Market Definition in Two-Sided Markets: Theory and Practice*, 10 J. Competition L. & Econ. 293, 296-97 (2014). For example, an assessment of the competitive realities facing a website serving advertisements must take into account the interests of both advertisers and site visitors who experience the advertising.
environment is characterized by very low barriers to entry. Very often the capital costs of starting and scaling a business will be much lower than in the offline world. Decreasing prices for cloud storage, worldwide reach, and widely accessible data analytics tools make it relatively easy to start a business online. In addition to this, consumers are in no way prevented from trying and flocking to other online services. In fact, industry-led initiatives like the Data Transfer Project, discussed above in Topic 1, make it even easier for consumers to switch to another online provider. The amount of app downloads per year has constantly been on a rise. The Commission’s enforcement practice rightly highlighted the importance of user ‘multi-homing’ and the ease of switching in digital markets. While it’s true that these market dynamics allow companies to grow very quickly, it’s the very same dynamics that continue to place competitive pressure on them. The dynamics that helped companies grow fast could just as fast turn against them if they stopped innovating.

3. Network Effects

As with all other economic concepts, it is difficult to describe the role of network effects in the competitive analysis in a general manner. As ex post competition enforcement is based on a case-by-case approach, the role of network effects must be assessed in each individual case.

Network effects, or demand side economies of scale, are present when the value of adopting a service to an incremental user is larger when more users have already adopted. Importantly, this dynamic is likely to produce consumer benefits as the value and usefulness of the network increases in parallel with the number of network participants. Network growth creates, therefore, pro-competitive benefits that are reaped by consumers.

Bearing the above in mind, the evaluation of network effects in competition analyses should also be accompanied by an analysis concerning the extent to which ‘single-homing’ and ‘multi-homing’ are present in a given market. For example, Professors Haucap and Heimeshoff acknowledge that:

“In two-sided markets increasing concentration will be driven by indirect network effects, but capacity limits, product differentiation and the potential for multi-homing (i.e., the parallel usage of different platforms) will decrease

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21 See e.g. Commission Decision in Case No COMP/M.6281 Microsoft/Skype (2011). Available at: [http://ec.europa.eu/competition/mergers/cases/decisions/m6281_924_2.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m6281_924_2.pdf)

22 See e.g. the CMA’s in-depth discussion of network effects in the recent Just Eat/Hungryhouse merger inquiry, available at: [https://www.gov.uk/cma-cases/just-eat-hungryhouse-merger-inquiry#final-report](https://www.gov.uk/cma-cases/just-eat-hungryhouse-merger-inquiry#final-report)


concentration levels. How easy it is for consumers to multi-home depends, among other things, on (a) switching costs (if they exist) between platforms and (b) whether usage-based tariffs or positive flat rates are charged on the platform.  

Multi-homing refers to those instances where customers use more than one platform or service, whereas single-homing refers to those instances where customers only use one platform or service in a particular industry. Compared to previous physical networks, many of today's online platforms may be more susceptible to disruption from new entrants thanks to lower barriers to entry, low switching costs, the prevalence of free-to-the-user business models, and multi-homing. Economist David Evans rightly states that:

"Online platforms are more susceptible to attack by entrants than network industries of a century ago. Network effects and sunk costs made the natural monopolies around the turn of 20th century difficult to challenge. Rivals had to sink massive amounts of capital into duplicating physical networks such as railroad tracks and telephone lines. Using multiple networks, or switching between them, was expensive for customers, even if a second network was available. However, online platforms can leverage the Internet to provide wired and wireless connections globally. People find it generally easy, and often costless, to use multiple online platforms, and many often do. The ease and prevalence of multihoming have enabled new firms, as well as cross-platform entrants, to attract significant numbers of users and secure critical mass necessary for growth. Incumbent platforms then face serious competitive pressure from new entrants—startups or other online platforms—because their network effects are reversible."

In sum, the presence of network effects merits closer analysis, but so do factors that countervail the potentially anti-competitive impact of them such as users’ ability to multi-home. In addition, network effects cannot be seen as a long-lasting moat. They are reversible, i.e. just like they have worked in favor of a company, they can start working against it as competitors benefit from the same effects. A case-by-case analysis that takes into account evidence, economic analysis, and that is specific to the facts remains key to safeguarding consumer welfare.

4. Competition Policy vs. Regulation

The Commission’s notion that “the interests of platforms are not always aligned with the interests of their users” has not only lead to discussions within the realm of competition policy but has had a very concrete impact in the regulatory sphere. However, before we get

to this interplay between competition and regulatory policies, CCIA would like to strongly push back against this notion, which constitutes an unfortunate starting point for this discussion.

As discussed extensively above, what the Commission refers to as ‘platforms’ are complex multi-sided business models. Each ‘side’ consists of a different constituency that will have individual needs and interests. ‘Platforms’ provide the place for interaction between these sides and are hence at the centre of moderating and balancing these various interests. Needless to say, they do so while also trying to safeguard their own interests, e.g. protecting their brand value. Just because a given user group is not happy with certain policies or decisions does not mean that the interests of platforms and this user group are misaligned. A multi-sided business model will only be successful if it is able to generate a win-win situation between its various constituencies. If the various sides win, the platform wins. Hence, from an economic perspective, there are very strong incentives for the various interests to be aligned as much as possible.

With respect to the interplay between competition and regulatory policies, the Commission has recently published a draft proposal for a Regulation on promoting fairness and transparency for business users of online intermediation services and search engines. While the proposal imposes new transparency obligations and establishes new redress mechanisms, it does not attempt to regulate business practices. CCIA welcomes this approach and calls on the Commission to make sure it will be maintained in the final inter-institutional dialogue. Should that not be the case, there will be a very serious risk of regulation encroaching on the competence of competition enforcers - particularly over business practices that are both controversially discussed in the antitrust community and that are subject to pending court cases. For the sake of a clear division of competences and legal certainty, a clear separation between competition enforcement and regulation should be maintained.

Topic 3:
PRESERVING DIGITAL INNOVATION THROUGH COMPETITION POLICY. Do network effects, economies of scale and 'copycat' products impede innovation? In digital merger cases, is there scope to apply theories of harm based on a loss of innovation and/or loss of "potential competition" more often? Would a focus on innovation require updating our analytical tools?

“Digital Merger Cases” and their Impact on Innovation

Merger control, as part of the antitrust toolkit, remains a key element in ensuring that the economy remains dynamic. EU competition authorities as well as competition authorities abroad have applied merger control rules vigorously in recent years. This includes

transactions where the merger effects on innovation and competition have been analyzed, particularly in the case of R&D intensive industries. CCIA believes that antitrust authorities should continue to enforce merger control rules and evaluate transactions based on sound economic analysis that focuses on real and potential harm to consumer welfare.

Evaluating the impact of a transaction on innovation, along with price and product quality, is not new. When applying merger control rules, competition authorities have long analyzed the impact that transactions could have on innovation, particularly when there are overlapping markets. While some competition experts have suggested that it is a difficult exercise to predict how innovation will be impacted by a particular transaction, antitrust authorities have managed to analyze harm to innovation in a number of cases. Authorities analyze harm to innovation on a case-by-case basis and, among other factors, industry-specific elements such as market concentration, R&D output, and innovation efforts from merging parties and competitors. Because of this case-by-case approach, it is very difficult to say whether a theory of harm based on a loss of (potential) innovation should be applied “more often”. At the very least, an assessment of potential competition needs clear evidence that the party is a potential competitor that had plans to enter a market in a significant way before drawing conclusions.

In conclusion, the current competition framework is well-equipped to tackle competition challenges that may arise in the context of innovation-centered transactions and does not require an update of analytical tools to specifically account for mergers in the ‘digital economy’. This is in tune with the majority of stakeholder views, including the majority of NCAs, expressed in submissions to DG COMP’s consultation on procedural and jurisdictional aspects of EU merger control. While that consultation focused on potential complementary jurisdictional thresholds in EU merger control, also in that area the majority of respondents were not convinced that changes are needed to account for the specificities of digital economy mergers.

Final Comments on the Future of Competition Enforcement

The current antitrust framework has proven to have the necessary tools and to be flexible enough to ensure effective competition in the market. While the emergence of new business models may present new challenges for antitrust enforcers, there is no need to change competition rules for what many call the ‘digital economy’. The Commission’s enforcement practice should be guided by economic analysis on a case-by-case basis and with a clear identification of consumer harm.

The accumulation of data as such should not raise antitrust concerns. Companies are not successful because they hold a lot of data. They are successful because they found an innovative business model in a highly dynamic market environment characterized by low barriers to entry. They are also successful because they know what to do with their data and how to derive and turn insights into consumer benefits.

Privacy can be a parameter of competition but it should never be a goal of competition enforcement. Maintaining a clear dividing line between privacy and competition rules ensures legal clarity and shields competition authorities from getting involved in highly subjective analyses. Network effects certainly help in growing a company quickly. They can, however, just as fast work against companies, particularly as consumers increasingly multi-home.

The multi-sidedness of business models requires a balancing of interests. The notion of platforms’ interests not being aligned with their users is too simplistic. Multi-sided platforms have all the economic incentives to create win-win situations for their various users while trying to legitimately protect their own interests. These interplays must be considered in any competitive analysis.

Finally, a clear division between regulatory and competition policy should be maintained. The more legislators decide to regulate business practices, the more will they encroach on the competence of competition authorities. Because of this, the voice of competition authorities in these regulatory debates is fundamentally important.

Respectfully submitted,
Jakob Kucharczyk
Vice President, Competition & EU Regulatory Policy
Computer & Communications Industry Association
Rue de la Loi 227, 1040 Brussels
jkucharczyk@ccianet.org
Transparency register ID number: 15987896534-82