

Data and competition law

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Abstract:

Digital firms often use the data provided by their users to offer a service that improves as the number of data and users increases. This accounts for the large size of Web platforms, which often enable digital firms to hold a dominant market position. For all that, is it necessary to change the rules of competition to adapt to this new business? Or are the usual arrangements under competition law effective in this sector for both detecting and sanctioning the anticompetitive actions undertaken by these platforms? Following a review of the procedures applied in the digital realm, information is provided for answering these questions.

Firms with a business model based on digital technology are operating in all branches of the economy: transportation, the hotel business, banks, culture, entertainment, etc. Digital platforms do not form a single “sector” of the economy. In some cases, they are revitalizing customer services thanks to digital technology (like the platforms that, competing with taxis, offer rides with drivers) or creating new services that only they can offer (like the delivery of real-time traffic information). These firms have different positions in terms of competition depending on whether they are newcomers in existing markets or innovators in emerging markets. Nevertheless, they definitely share a common point: they offer services with the help of algorithms that use, as raw material, users’ data.¹

Using data to supply services is not new. Statistics and data now have a long history; and the firms concerned have not entered the market in the past few years. Weather services and market studies, for instance, have long relied on data-processing. The disruption under way comes from the fact that the data of a platform’s users are now the ingredients for the operation of its services. Unlike a weather service, which uses scientific data to make predictions, a platform that provides information to drivers uses data about the location and movements of the drivers connected to it; a platform for product comparisons uses the ratings made by the customers who have made purchases via the platform; and a search engine displays the findings that cybernauts with the same query have consulted the most.

Unlike the services that rely on statistical or scientific data, the firms that use users’ data improve their services insofar as they have more users. This *DIRECT NETWORK EFFECT* means that the number of consumers of a product or service increases the latter’s utility for each consumer owing to the improvement in quality. Other platforms operate using *INDIRECT NETWORK EFFECTS*: the more people on the one side of the platform (drivers, hotels), the greater the utility of the service for users on the other side (persons looking for rides or accommodations); and vice versa. In both cases, a key to success for these services is their ability to recruit large numbers of users. For digital firms, improving the quality of the service (and, therefore, the attractiveness of the platform, which often offers services for free to users) implies a huge size (ROCHET & TIROLE 2003, ARMSTRONG 2006). In particular, a platform’s efficiency often depends on big data. Whether for ranking search findings to a query, offering a range of accommodations or proposing

¹ This article has been translated from French by Noal Mellott (Omaha Beach, France). The translation into English has, with the editor’s approval, completed a few bibliographical references.

information for guiding drivers during a traffic jam, the algorithms developed by online platforms work all the better insofar as they optimize their results thanks to a large pool of users.

These new business models give rise to several problems with respect to competition. How to assess the potential danger to competition of a platform with big databases, a danger that might come from several sources. Owing to the digital economy, some of these problems have a new order of magnitude (STUCKE & GRUNES 2016). Does the fact that a platform has so many data about the user hinder the latter from switching platforms? Does it, therefore, keep consumers from playing the competition between operators? Are these data likely to impede the entry of newcomers in the market? Do they guarantee a dominant position to the operator who has them? Is current competition law capable of handling the complex problems stemming from big data and algorithms?

Demand side: Data and restraints on mobility

The consumers who join a platform are often “attached” to it for several reasons. On e-business platforms, they often enter their banking references to simplify subsequent purchases or make it easier to place an order using a smartphone. A social media platform contains data on all the cybernaut’s relations, the history of exchanges, photographs, videos, shared documents, etc. On the platforms for rides, consumers may enter their frequent destinations to speed up searches. Smartphones also contain contents (the music and videos, in particular, which the user has bought over time).

A consequence of the fact that the consumer has data stored on a platform is that it is harder to switch operators (NASSE 2005), since re-entering all these data on a new platform has a cost that makes the consumer reluctant to switch and thus hampers mobility between platforms. The sectors where the switching costs are high for consumers are, therefore, much less exposed to competition; and those platform operators can extract economic rent from users.

These costs are, obviously, of different sorts; they are not equivalent. The cost of entering on a website information about one’s debit card or about the destination for a trip is a matter of time and is, moreover, low; whereas music purchases accumulated over several years can amount to a significant sum of money. Likewise, the history of exchanges on the social media and the personal data accumulated there that cannot be reconstituted (not to mention the risk of losing them) hold the user back from switching.

These restraints and restrictions that hamper mobility are not a new problem. Similar restraints impede competition in the banking sector, for instance. The detection of this problem led French authorities to adopt several measures to redress the situation, such as the requirement that, when a customer switches banks, the two banks concerned help facilitate the change. The equivalent in the digital economy are the measures allowing for the “portability” of the user’s data (in line with the portability of the telephone number when a customer switches operators), the intent being to “oil” competition. Under Article 12 of the so-called Lemaire Act,² consumers should be able to take their data accumulated on a platform with them when switching platforms. This possibility is effective on a wider scale as of 25 May 2018 under the EU’s General Data Protection Regulation (GDPR).³ Its primary objective is not to oil competition but to enable netizens to control their digital contents. Nonetheless, this has important consequences on competition since it reduces restraints on mobility by enabling consumers to choose their platform in a competitive environment based on its “merits”.

² Act n°2016-1321 of 7 October 2016 for a “digital republic” available at <https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000033202746&categorieLien=id>.

³ The GDPR (General Data Protection Regulation): “Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data”. Available via: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1478961410763&uri=CELEX:32016R0679>.

Supply side: Data as a source of anticompetitive practices

The other question raised by the accumulation of data on digital platforms has to do with the anticompetitive practices that result from controlling the data. The joint report by the German and French competition authorities has reviewed the procedures whereby a platform that holds data can increase its market power and set the conditions for it to abuse its dominant position (BUNDESKARTELLAMT & AUTORITÉ DE LA CONCURRENCE 2016).

Online platforms tend, in fact, to want to increase the volume of data at their disposal, since their performance directly depends on it. For example, a search engine's quality depends on the relevance of the findings that it proposes in response to cybernauts' queries. This relevance is improved thanks to the "multitude" of persons who use the query, since their behavior in response to the proposed findings helps the algorithm to improve its results. This tendency toward bigness is reflected in the growing number of concentrations in the data business in OECD countries: from 55 in 2008 to 164 in 2012. But being big and eventually holding a dominant position are not necessarily a factor in the abuse of this dominant position.

Data enable an Internet operator to be relieved from the pressure of competitors and take advantage of its dominant position when holding the data forecloses the market to competitors. This could happen, for example, if access is refused to the data indispensable for offering a service — data that are an "essential facility" in the words of the law, which is seldom the case. Algorithms can also discriminate by price among users by drawing on the granular knowledge of the individual's queries. Here too however, price discrimination might stimulate competition and ultimately be a boon to consumers as, for example, lower prices are proposed to those who have a low propensity to pay for the service. The possibility of excluding competitors from the market through price discrimination will only arise under special conditions, which have to be examined case by case.

Other factors can mitigate the danger of an abuse of dominant position. Network effects might stimulate competition instead of hampering it. A newcomer offering an innovative service can turn the network effects to his advantage by "going viral" and thus attracting users. Since cybernauts have the possibility to simultaneously use the services of several platforms — multihoming (GABSZEWICZ & WAUTHY 2005) — they can place different services in competition. Furthermore, digital technology boosts innovation, which also tends to strongly stimulate competition.

The continual arrival of newcomers in the market suggests that no firm actually needs the data held by the established firms in order to be able to enter the market. According to most studies on this, the necessary data (the consumer's preferences and centers of interest, geolocation data, etc.) can be collected rather easily and quickly in a large quantity when a new offer is launched. Besides, the data needed for a service can be obtained from various sources. The report of German and French competition authorities has cited the example of cybernauts' musical tastes, which can be detected directly via their purchases on music platforms, via their browsing patterns on sites for streaming music, via the queries they enter in search engines, or even via their personal pages on the social media (BUNDESKARTELLAMT & AUTORITÉ DE LA CONCURRENCE 2016). These examples keep us from considering that such data are an "essential facility" in the sense of competition law.

Should the rules of competition be changed to deal with digital firms?

Arguments have been made in favor of adopting specific regulations for online platforms or, at the very least, adapting competition law to the specificity of the digital economy. The size of platforms, the virtual nature of their activities, the existence of network effects that tend toward the formation of dominant market positions, the holding of large volumes of data... all these factors have led some pundits to want to control the platforms' economic practices through *ex ante* regulations, while others want to modify competition law.

Given the current state of knowledge, these arguments do not hold up under examination. First of all, platforms' practices can be analyzed in terms of competition. The platforms are often active in markets (*e.g.*, websites for comparative shopping) where several economic agents are competing and where operators are fighting to attract traffic or advertising (in particular, targeted advertising). Furthermore, this competition is visible. Since several players are already competing in these markets by adopting various strategies (prices, bundling, promotions, etc.) — but of sorts that have been the subject of traditional analyses — we see no reason why these markets should not be subject to an *ex post* analysis in terms of competition.

Nor is the fact that the structure and technology of online businesses are based on important innovations a sufficient argument for new regulatory tools. There are so many phases in the transition toward digital technology and so many new business models; but studies on competition have been adapted to them. The French competition authority has, following an analysis using new methods, concluded that a single market exists for sales both online and in brick-and-mortar stores (the case of the merger of FNAC and Darty). Competition authorities have already had to examine the risks to competition in a market when the actions of two firms with big data converge. One characteristic of databases is that their growth causes externalities, since the data's potential value stems from this growth and is multiplied in comparison with the value of the data taken separately. For its part, the European Commission has sanctioned Google for favoring its own services, Google Shopping, to the detriment of others price comparison websites.

The objection can be made that the time needed to examine a case and reach a decision is too long in comparison with e-business activities. However this is an argument for reskilling regulatory authorities to enable them to better handle problems related to digital technology and, even more, for the recruitment of data and computer scientists (LANDIER *et al.* 2015, BACACHE-BEAUVALLETA & PERROT 2017).

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