Opinion on data processing in the online advertising sector

Autorité de la concurrence

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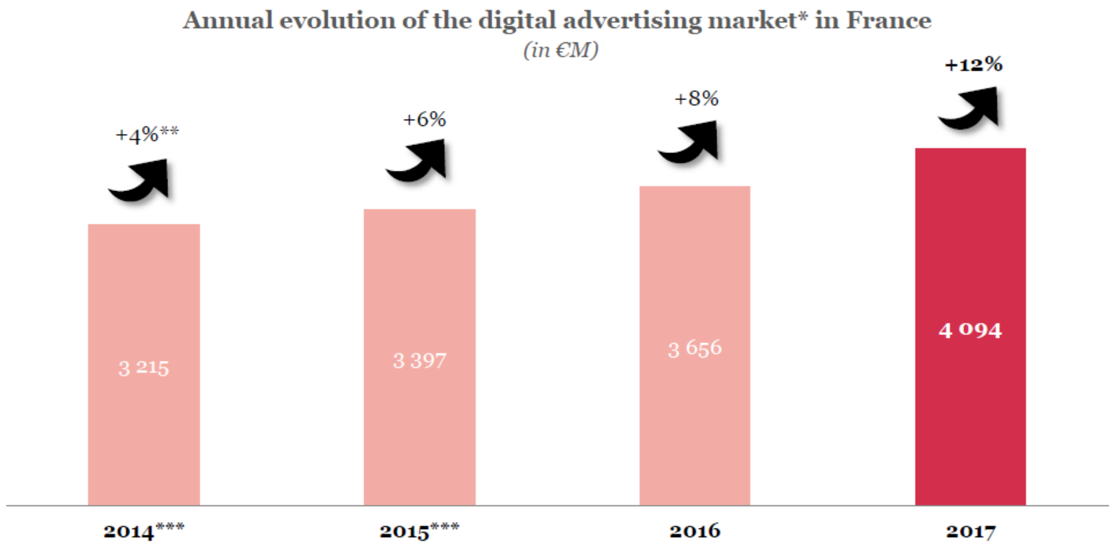
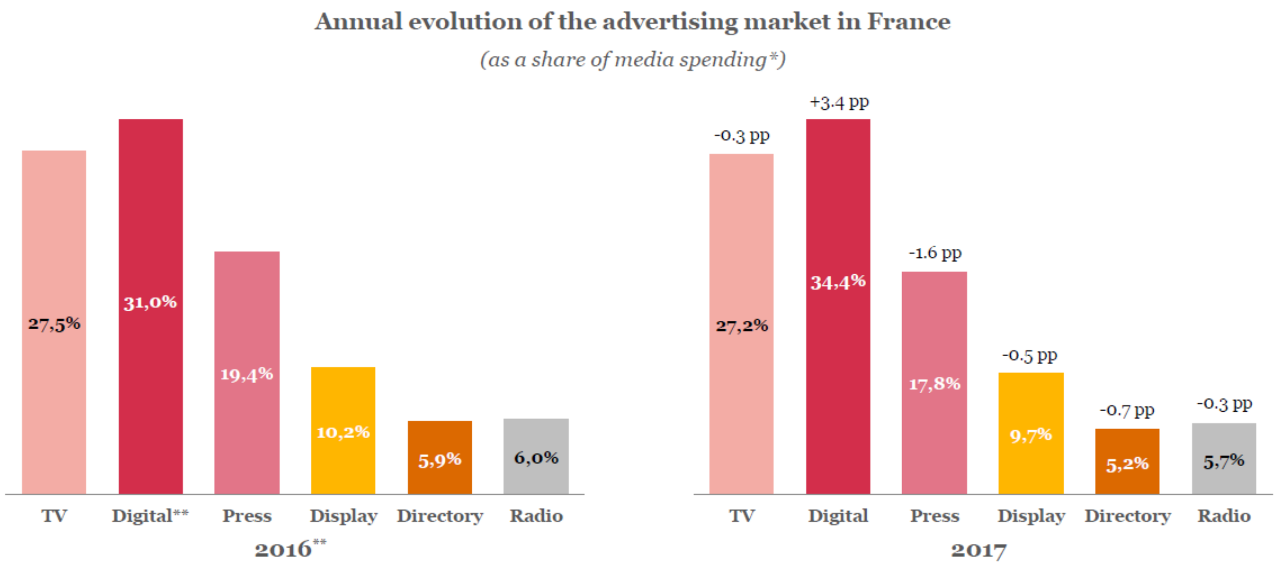
Calendar

May 2016	Decision pertaining to an opinion issued at its own initiative on data processing in the online advertising sector
June to September 2016	Meetings with the economic actors
September 2016 to March 2017	Sending questionnaires (advertisers, publishers, advertising service providers, Google and Facebook) and analyzing actors' responses
July to October 2017	Public consultation of the Competition Authority and analysis of stakeholders' responses
June and October 2017	Hearings by the College of the Competition Authority
November 2017	Adoption of the opinion

The growth of the internet advertising sector



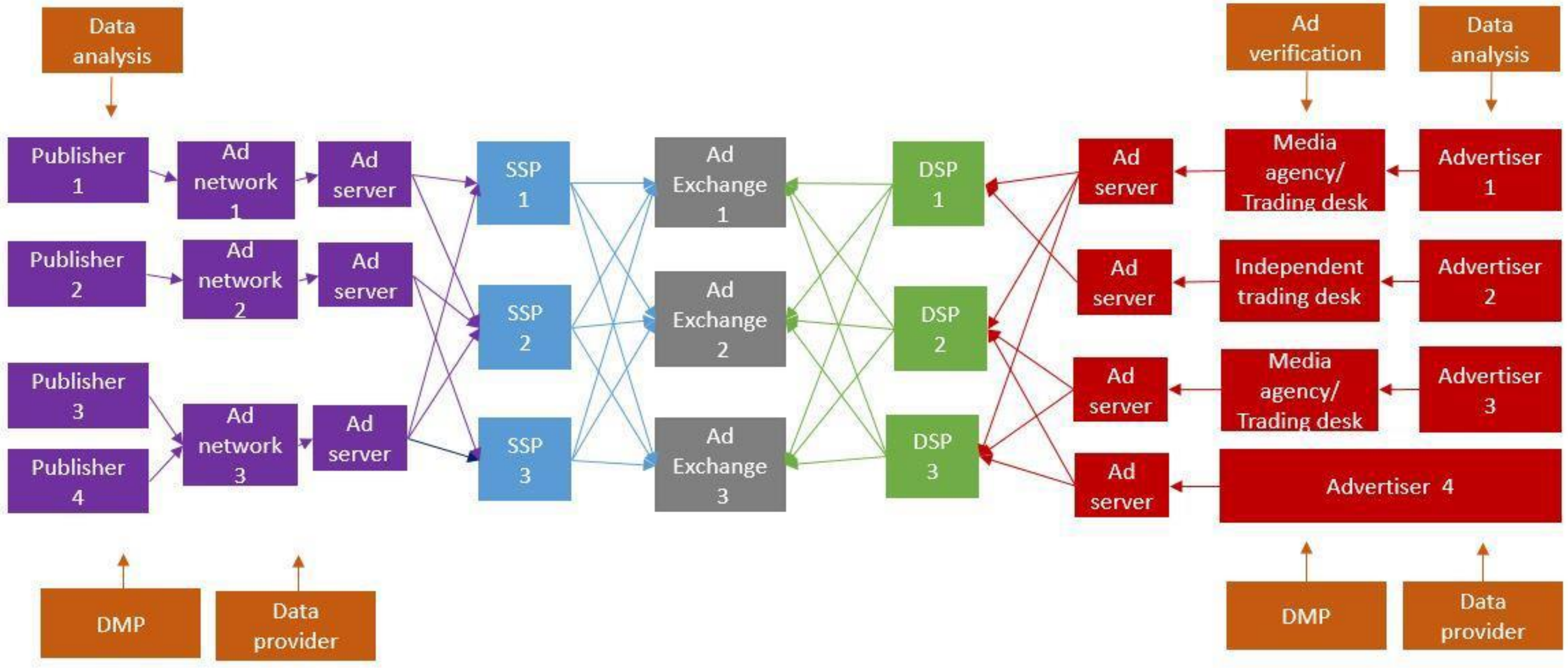
Since 2014, the growth of the internet advertising sector has accelerated and reached 12% in 2017, with a turnover of more than 4 billion euros. Growth is driven by the widespread use of programmatic technologies, the development of video advertising, and the high rate of use of social networks, search engines and video sharing platforms by French people.



Advertising is the main source of revenue for thousands of publishers on the internet in France and around the world and is therefore an issue for media funding (press and audiovisual). Since 2016, advertising on the internet is the largest advertising market in France. The share of all other advertising markets is down.

Source : Udecam, Syndicat des régies internet (SRI), PWC, *Observatoire de l'e-pub*, Bilan 2017

Overview of players in the online advertising sector



Today, the sector is characterized by a proliferation of new players whose services are based (at different levels), on the massive exploitation of data on individuals, thanks to new computing capacities. The fundamental driver of the sector’s upheavals is the effectiveness of the targeting promised by the new forms of advertising, which, according to its promoters, would allow a higher efficiency than the others in terms of return on investment.

Real-time bidding process in the advertising sector

Websites generally leave a file (cookie) on the user's computer in order to recognise and track his/her interests (travel, shoes, etc.) or browsing activity.

When a user visits a website, the publisher checks these cookies and adapts the content offered to the user. When an ad is displayed, the page starts loading and leave an empty space that is offered up to sale to advertisers.

BROWSER

When a page begins to load, the browser sends a request to the ad server to find out if the space in question is under a direct agreement between and advertiser and publisher

AD SERVER

YES: The ad space is reserved under a direct agreement.

NO: **SSP**

The publisher's SSP is contacted and receives information concerning the user (e,g, from cookies and data providers) and the ad space.

AD EXCHANGE

The ad space is offered for sale on an ad exchange with its characteristics.

DSP1 **DSP2** **DSP4** **DSP3**

DSPs connected to the ad exchange compare the data they receive with the data in their databases to find matches for their clients. This can potentially be enriched with their third-party data.

AD EXCHANGE

All this information helps DSPs determining how much they will bid. These bids are made on the ad exchange. If a DSP finds matches with the user, it checks to see if there are programmatic direct agreements between the publisher and advertiser. Depending on the case, the DSP can choose not to make a bid

SSP

The SSP receives the bids from all DSPs and chooses the highest bid. It then sends the « winning » ad with the highest bid to the user's browser.

AD SERVER

The browser calls the ad server of the highest bidding advertiser to obtain instructions on the ad and how it has to be delivered.

BROWSER

Finally, the user's browser serves the ad in the dedicated space.

The user then sees a specifically targeted ad on the website, almost instantaneously.

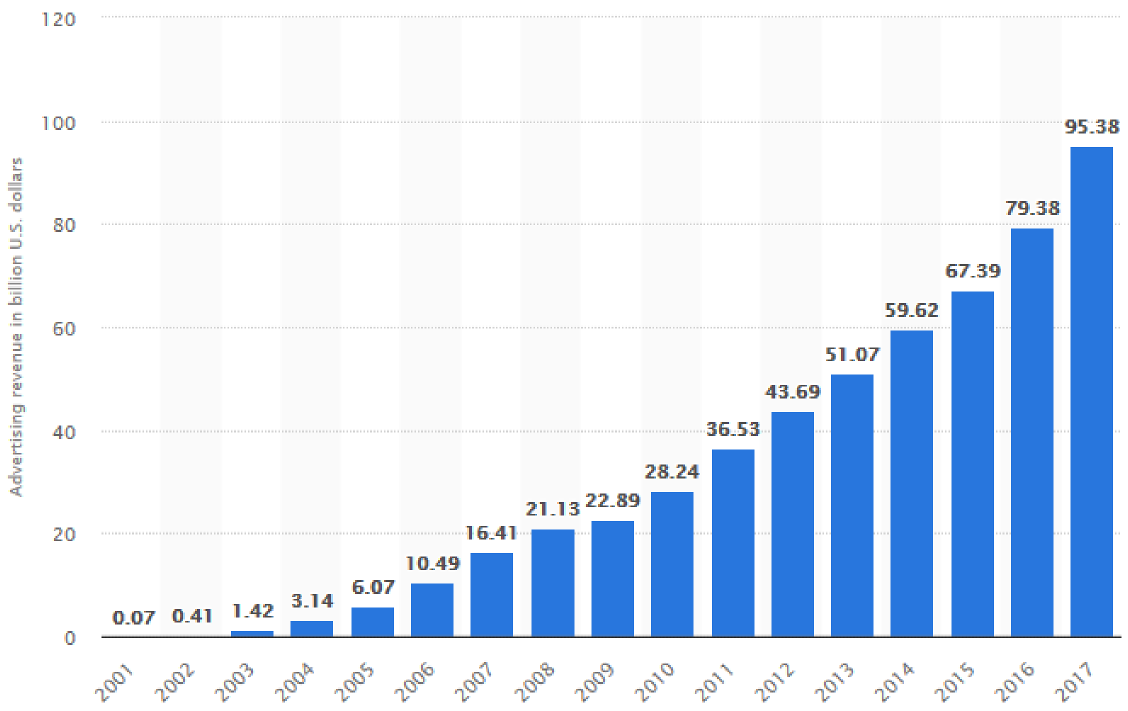
Exploitation of different types of data

User data	Customer data (areas of interest, age, gender, language), contact information (email address, telephone number), browsing data (pages visited, time spent on a site, etc.), purchasing data (products purchased, number of orders), geolocation data	*Determine the most relevant advertisement for a given user*
Product data	Catalogue of the advertiser's products, name and category of products searched and viewed	
Purchase data	Purchased products ; number of commands ; average basket	
Device data	Information on the terminal, connections and the specific identifiers for the terminal (IP address, Device ID)	*Adapt the display of the advertisement to the environment of the user*
Campaign data	Data on impressions (distribution context, volume, characteristics and quality/visibility/fraud), bidding data (bids made, winning bid price, number of bids won for bids made)	*Adjust the bid level to the value of the ad slot and the click probability of the user Monitor and optimize performance of advertising campaigns*
Website and application data	Website traffic, advertising space, site structures and themes	*Track and optimize the performance of application advertising campaigns*

The positions of Google and Facebook

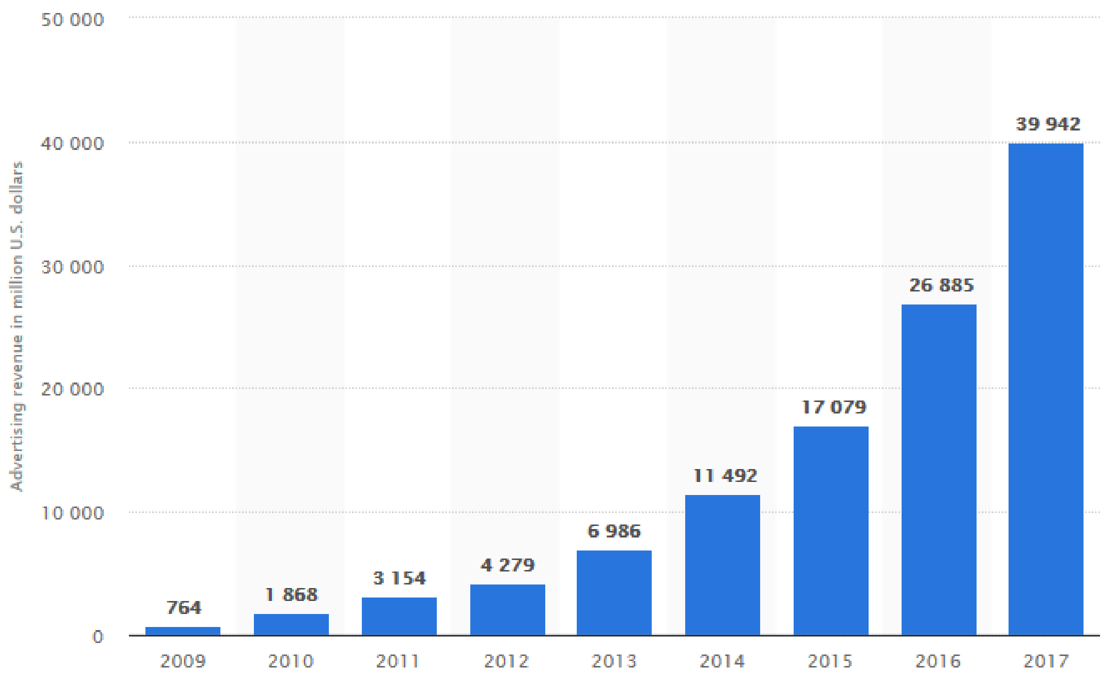
Most of the turnover and growth of the sector worldwide and in France is achieved by Google and Facebook.

Google's annual advertising revenue from 2001 to 2017 (worldwide)



Source : https://www.statista.com/statistics/266206/googles-annual-global-revenue/

Facebook's annual advertising revenue from 2009 to 2017 (worldwide)



Source : https://www.statista.com/statistics/268604/annual-revenue-of-facebook/

Competitive landscape

Worldwide, few large companies represent a potential threat.

The most powerful publishers and platforms, such as Amazon, are able to get vertically integrated, enabling them to sell their inventories without depending on technical intermediaries..

In the advertising intermediation sector (DSP, SSPs…), many actors do not have proprietary sites on which they can directly market advertising spaces, and their position appears fragile in several aspects.

Net Digital Ad Revenue Share Worldwide, by Company, 2016-2019
% of total and billions

	2016	2017	2018	2019
Google	32.8%	33.0%	32.4%	32.3%
Facebook	14.1%	16.2%	17.7%	18.7%
Alibaba*	6.6%	7.8%	9.0%	9.2%
Baidu	4.3%	4.2%	4.3%	4.5%
Tencent	2.2%	3.0%	4.0%	4.9%
Microsoft (Microsoft and LinkedIn)**	2.3%	2.7%	3.1%	3.5%
Yahoo	1.6%	1.4%	1.2%	1.1%
Twitter	1.2%	1.0%	0.9%	0.9%
Amazon	0.7%	0.8%	0.9%	1.0%
Verizon (AOL and Millennial Media)	0.7%	0.7%	0.6%	0.5%
Pandora	0.6%	0.5%	0.5%	0.5%
IAC	0.5%	0.4%	0.3%	0.3%
Sina	0.4%	0.4%	0.4%	0.5%
Snapchat	0.2%	0.4%	0.7%	1.1%
Sohu.com	0.5%	0.4%	0.4%	0.3%
Yelp	0.3%	0.3%	0.3%	0.3%
Other	31.1%	26.7%	23.2%	20.4%
Total digital ad spending (billions)	**$190.57**	**$223.74**	**$259.84**	**$297.41**

*Note: includes advertising that appears on desktop and laptop computers as well as mobile phones, tablets and other internet-connected devices, and includes all the various formats of advertising on those platforms; net ad revenues after company pays traffic acquisition costs (TAC) to partner sites; *includes ad revenue from Alibaba's core commerce operations and Youku Tudou; **includes ad revenue from LinkedIn*
Source: company reports; eMarketer, March 2017

224290 www.eMarketer.com

Competitive advantages of Google and Facebook (1)

Google and Facebook services to internet users are the most used, and benefit from the largest audiences and advertising impressions.

The very strong audiences of the Google and Facebook proprietary services allow them to generate advertising revenues well above all of their competitors.

These services generate vast amounts of data, varied and frequently updated, the operation of which is the heart of the advertising targeting.

These services benefit from powerful network effects, which result both from the nature of the services and the positions of leaders held by these companies in their respective markets, and are interdependent.

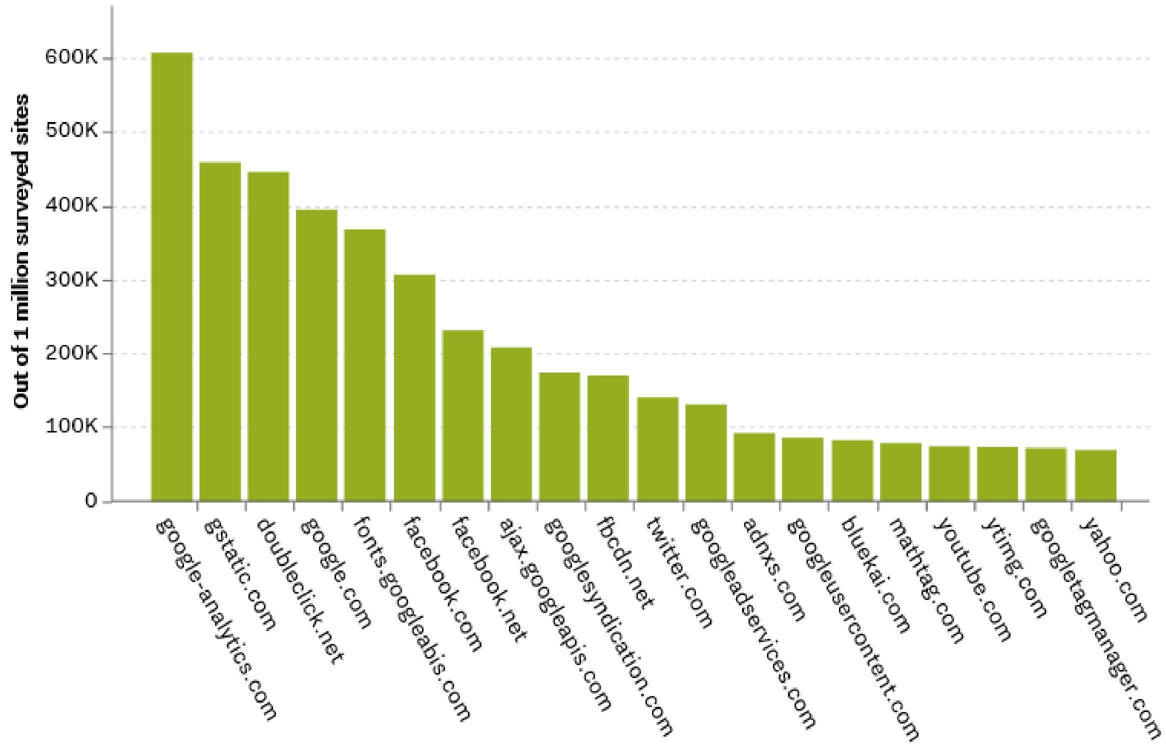
The top 30 most visited brands in France

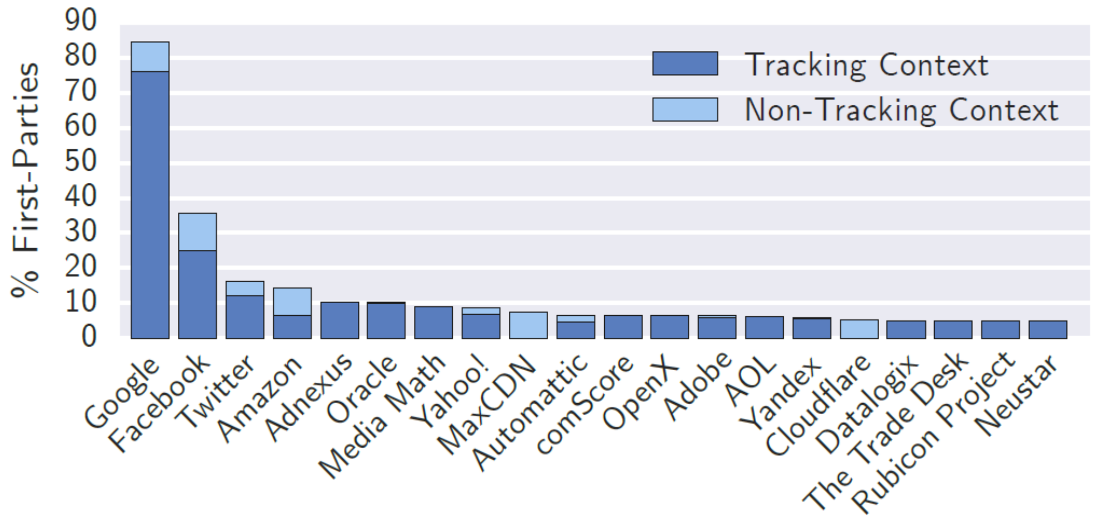
Rang	Marques* B	Visiteurs uniques par mois	Visiteurs uniques par jour
1	Google	44 568 000	28 897 000
2	Facebook	40 598 000	23 824 000
3	YouTube	36 864 000	10 915 000
4	Orange	25 074 000	7 898 000
5	Wikipedia	24 888 000	2 990 000
6	Amazon	24 074 000	3 500 000
7	Leboncoin.fr	23 562 000	4 357 000
8	Microsoft	22 664 000	2 630 000
9	Apple	20 032 000	8 627 000
10	Twitter	19 955 000	3 875 000
11	Instagram	19 857 000	5 159 000
12	Windows Live	19 840 000	3 282 000
13	Yahoo	18 442 000	4 901 000
14	Le Figaro	17 996 000	2 143 000
15	PagesJaunes	17 795 000	1 428 000
16	Cdiscount	15 682 000	1 435 000
17	Le Monde	15 549 000	1 954 000
18	franceinfo	15 492 000	1 818 000
19	SFR	15 272 000	3 422 000
20	LinkedIn	14 828 000	1 789 000
21	Le Parisien	14 791 000	1 328 000
22	Samsung	14 635 000	3 612 000
23	Meteo France	14 522 000	2 324 000
24	20minutes.fr	14 282 000	1 869 000
25	Free	14 038 000	1 652 000
26	Marmiton	13 961 000	1 119 000
27	BFM TV	13 942 000	1 590 000
28	TripAdvisor	13 754 000	1 072 000
29	L Equipe	13 597 000	2 627 000
30	Tele Loisirs	13 513 000	2 167 000

Source : http://www.mediametrie.fr/internet/communiques/audience-internet-global-en-france-en-aout-2017.php?id=1758

Competitive advantages of Google and Facebook (2)

According to a study conducted in 2016 by researchers at Princeton University on a million sites (the most important have been selected), it appears that Google, and to a lesser extent Facebook, have a preponderant position on the collection of third-party data. If there is a lot of third-party tracking tools, Google, Facebook, Twitter and AppNexus (via AdNexus) are the only companies that use tracking tools on more than 10% of sites.





Data collected on proprietary services or third-party services is used to provide targeting options, but also to monitor implementation and evaluate campaign performance.

Source : http://randomwalker.info/publications/OpenWPM_1_million_site_tracking_measurement.pdf

Commercial practices

Tying, low prices, exclusivities	Association of several intermediation services, association of intermediation services and provision of targeting data, association between an intermediation service and exclusive access to the inventory of a site.
Leverage effect	The use of dominant positions on certain markets to obtain better positions on other markets : media audit & media agency sectors ; ad services & data services for advertisers.
Discriminations	Differential treatment by players in the ad intermediation sector : possibility of monetizing certain types of videos on a platform ; conditions for DSP access to some ad exchanges and inventories.
Obstacles to interoperability	Interoperability barriers in the intermediation sector relating to the interconnection conditions between intermediaries in the context of real-time auctions and implementation of advertiser's campaigns.
Restrictions for collecting and accessing data	Refusal to integrate campaign tracking information for certain advertising formats, refusal to supply data on qualification by audience impression.

These practices can not formally be analyzed in the context of an opinion. The Authority merely observes that this type of practice can in principle be apprehended by the competition law.