Online platforms and
digital advertising
market study

Final Report July 2020

The full report can be accessed here

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Our market study

What have we looked at?
• To what extent Google and Facebook have market power in search and social media respectively and the sources of this market power
• Whether consumers have adequate control over the use of their data by online platforms
• Whether a lack of transparency, conflicts of interest, and the leveraging of market power undermine competition in digital advertising

What were the objectives of the study?
• Use information gathering powers to investigate substance of concerns in markets within scope and propose remedies as required
• Inform government thinking on regulatory reform in relation to online platforms, particularly in context of response to Furman Review
• To inform and influence the broader public debate, in the UK and globally, on the benefits and challenges posed by online platforms and how to respond
Weak competition harms consumers

1. Consumers miss out on innovative new products and services - barriers to entry restrict the development of new, valuable services.
2. Consumers have limited control over data - limited choice and competition means that people will be less able to control how their personal data is used.
3. Consumers get less compensation – consumers may receive inadequate compensation for their attention and the use of their data.
4. Consumers pay more - the costs of digital advertising, which are reflected in the prices of goods and services across the economy are ultimately passed onto consumers.
5. Consumers get less quality content - lack of competition reduces the incentive and ability of publishers (including online newspapers) to invest in news, journalism and other online content to the detriment of consumers and broader society.
Platforms funded by digital advertising provide highly valuable services, allowing us to find information in an instant and connect with family and friends often at no direct cost to the consumer.

Google and Facebook are the largest such platforms by far, with over a third of UK internet users’ time online spent on their sites.
Free isn’t always ‘free’

Online platforms typically seek to attract consumers by offering their core services for free. Once they have attracted a critical mass of consumers, they seek to make money from business users on another side of the platform.

While services such as search and social media appear to be free to those who use them, they are paid for indirectly through advertising revenues.
Digital advertising in the UK

- £14 billion spent on digital advertising in UK
- The value of digital advertising per household in the UK is £500
- Google enjoys a more than 90% share of the £7.3 billion search advertising market in UK
- Facebook has a share of over 50% of the £5.5 billion display advertising market
- ‘Open display’ comprises around 30% of display advertising market
- Around 80% of all search and display advertising was accrued by Google or Facebook
Search

• Google has >90% of searches and of search ad market
• Google’s revenue per search has more than doubled since 2011
• Google’s prices are 30-40% higher than Bing on desktop and mobile on a like for like basis for a sample of searches
• Google’s return on capital employed from search is significantly higher than 40%, far in excess of its cost of capital

“Google is around 90% of all searches. It’s the market!”
- CMA Jigsaw qual research report
Display

- Facebook (including Instagram and WhatsApp) reaches over 85% of UK internet users and accounts for around 75% of time spent on social media platforms
- For every £ spent on display advertising in the UK (across all websites) Facebook receives more than 50 pence
- Facebook’s annual revenue per user has increased significantly from less than £5 in 2011 to more than £50 in 2019
- Facebook’s return on capital employed is more than 50%—more than five times above its cost of capital
Consumers are not in control of their data, platforms are

• Most platforms serve consumers with personalised advertising by default

• Consumers have some control over their data, but frequently this is limited. For example most social media platforms do not allow consumers to turn off personalised advertising

• Most consumers say they place value on their ability to control access to their data, and only a small minority (13%) say they are happy to share their data in return for relevant adverts

• This does not translate into action – there are many barriers to engagement:
  • Choice architecture including default settings & the lead option consumers are invited to agree to for privacy settings and controls are highly influential
  • Terms and conditions are long and complex
  • A consumer may need to read 10,000 words before signing up to a service if they are to understand how their data will be used
In preparing our report we conducted a significant amount of data work. For example:

- we analysed search queries and search ad prices for all (several billion) queries in a week in February across Google and Bing in the UK to compare the distribution of search queries and like-for-like advertising prices

- we gathered data on advertising revenues, prices and volumes across the main platforms to compare rates of monetisation and changes over time

- we collected data on fees and volumes from all the main ad tech players to assess average fee levels and aggregate take by intermediaries compared with the amount passed on to publishers

- we analysed data on Google’s ad tech fees across several billion transactions to assess Google’s fee rates and test for ‘hidden’ fees
Why are these markets so entrenched?

Network effects and economies of scale  
Consumer behaviour and the power of defaults  
Unequal access to user data  
Lack of transparency  
The importance of ecosystems  
Vertical integration and conflicts of interest
Network effects and economies of scale

- Lack of scale limits the ability of other platforms to compete with Google and Facebook
- Google sees much more click-and-query data than other search engines, supporting its ability to produce more relevant search results
- Social media platforms are characterised by strong network effects and Facebook has by far the largest network
- Other platforms are not close substitutes to Facebook and consumers generally use them as well as (not instead of) Facebook
Defaults

- Defaults have a significant impact on consumer behaviour, especially on mobile devices.
- Google’s extensive default positions (including on most browsers and almost all mobile devices in the UK) act as a barrier to expansion for other search engines.
- Google pays 17% of search advertising revenues in return for being the default search engine on Apple and large mobile phone manufacturers and browsers.
- Defaults and choice architecture also nudge consumers into giving up more data, particularly on social media platforms.

Search default positions on mobile and desktop devices, based on device usage, February 2020

- Google
- Bing
- Unknown*

Windows (Desktop Devices): 68%
Apple (Desktop Devices): 27%

Samsung (Mobile Devices): 26%
Apple (Mobile Devices): 52%

Xiaomi, Huawei, Other (Google Default) (Mobile Devices): 1% each
Google, Amazon, Other (Unknown) (Desktop Devices): 1% each

Around £1.2 billion
The amount paid by Google in 2019 for default positions in the UK alone
Unequal access to data

Google collects data from services such as search, YouTube, maps mobile phones (android) and tags.

Facebook collects data from services such as Facebook, Instagram, Whatsapp and pixels.

The inability of smaller platforms and publishers to access user data creates a significant barrier to entry.
Data protection and competition

- Safeguarding people’s control over their data is paramount to privacy as well as to the healthy operation of the market.
- As a result of their gatekeeper role and market power, large platforms such as Google and Facebook are increasingly acting in a quasi-regulatory capacity in relation to data protection, setting rules around data sharing not just within their own ecosystems, but for other market participants.
- The CMA is concerned that big platforms could be interpreting rules in a way which favours their business models, instead of in a way which gives users control of their data.
- For example, big platforms might share user data freely across their own sizeable business ecosystem, while at the same time refusing to share data with reputable third parties – which could have a detrimental impact on smaller players.
- The CMA’s market study advocates a competitive-neutral approach to implementing data protection regulation, so that the big platforms are not able to exploit privacy regulation to their advantage.
Lack of transparency

• In order to deliver targeted advertising, platforms identify and target users through algorithms that process large quantities of data in real time.

• Because this process occurs in a ‘black box’, advertisers and publishers find it difficult to understand or challenge how decisions are made and to exercise choice effectively, undermining competition.

• Auctions are opaque and give considerable discretion to platforms over which auctions advertisers participate in and even their bids.

• The lack of transparency means there is no visibility of the fees charged in open display. Intermediaries capture at least 35% of the value of advertising bought through the open display channel – a figure we would expect to be lower with greater competitive pressure.
Eco-systems

- Google and Facebook have built large ecosystems of complementary products and services around their core service.

- This type of integration can improve efficiency and the consumer experience.

- It can also give rise to competition concerns:
  - Increased barriers to entry
  - Leveraging market power into other markets
  - Increasing their consumer attention, data and revenues in a way that creates a feedback loop and strengthens their positions.
Conflicts of interest

- In the open display market, publishers and other content providers compete to sell advertising inventory using a wide variety of third-party intermediaries.

- Google has three sources of market power in open display: its large base of advertisers; its data on users; and its strong position in intermediation, particularly as largest publisher ad server, initially through the acquisition of DoubleClick and other intermediaries.

- Vertical integration can allow platforms to realise technical efficiencies, it can also give rise to conflicts of interest. Google’s strong position at each level of the intermediation value chain creates clear conflicts of interest – range of concerns about self preferencing.
What can be done?

There is a compelling case for the development of a pro-competition ex ante regulatory regime (see next slide).

An **enforceable code of conduct**, which is designed to govern the behaviour of platforms that have market power; and

A range of **pro-competitive interventions**, which are designed to tackle the sources of market power and promote competition and innovation.
The case for change

- **Barriers to entry are self reinforcing** - Network effects and consumer default behaviour lead in combination to a form of path dependency, in which incumbent platforms generate higher revenues and attract more consumer attention and data, which can then be leveraged across ecosystems to consolidate and increase market power.

- **Current tools are not sufficient** - CMA's current tools, which allow us to enforce against individual practices and concerns, are not sufficient to protect competition given these barriers.

- **Markets are fast moving** - the issues arising within them are wide-ranging, complex and rapidly evolving. Tackling such issues requires an ongoing focus, and the ability to monitor and amend interventions as required.

- **Can prevent harmful conduct from occurring** - Moving from intervening only after conduct occurs towards earlier action through a clearer and more detailed set of rules will help to prevent negative outcomes before they occur

We therefore believe there is a need for a new pro-competition regulatory regime:
- strong and clear ex ante rules which can address a wide range of concerns holistically
- can be enforced rapidly by a dedicated regulatory body (Digital Markets Unit – DMU)
- can be updated and refined as required
Why a code?

Purpose of the code is to protect competition by governing the behaviour of platforms that have market power over an important online gateway.

\textit{In this context the term code refers to mandatory ex-ante regulation that is a complement to ex post enforcement – the features of this are elaborated on the next slide.}

We believe the enforceable code of conduct would have a number of advantages over existing ex post enforcement tools, including:

- the ability to cover a much \textit{wider range of concerns} holistically;
- the ability to respond to address concerns \textit{more rapidly};
- a \textit{greater focus on remedies} and remedy design; and
- greater \textit{clarity} for platforms and other market participants.

Having a dedicated Digital Markets Unit focus on the sector should also help develop regulatory \textit{expertise} and understanding over time.
Features of the code

• Mandatory
  • powers given to the DMU to suspend, block and reverse decisions of SMS firms and order conduct in order to achieve compliance with the code
  • appropriate enforcement mechanisms

• Principles based
  • Future proof against rapid market change
  • Backed up by guidance to give greater clarity

• Apply to platforms with strategic market status (market power and gateway function)
  • We think Google and Facebook have SMS against any reasonable test
  • Should apply to the corporate group as a whole, covering core and adjacent markets
Code of conduct – content

• Covers a variety of relationships between SMS platforms and users:
  • advertisers’ and publishers’ relationships with platforms in relation to buying and selling digital advertising;
  • publishers’ and content providers’ relationships with platforms as a gateway for accessing consumers;
  • business users’ relationships with platforms where they provide services via platforms but also compete with the platforms’ own services; and
  • consumers’ direct interactions with platforms (eg using a search engine or accessing a social media page).

<table>
<thead>
<tr>
<th>Objective / principle</th>
<th>Examples of concerns that could be investigated</th>
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<tr>
<td><strong>Objective 1: Fair trading.</strong> fair trading principles are intended to address concerns around the potential for exploitative behaviour on the part of the SMS platform</td>
<td>• Data gathering from business customers • Concerns relating to exploitation of auction algorithms • Unfair balance of power between publishers and platforms</td>
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<td><strong>Objective 2: Open Choices.</strong> open choices principles are intended to address the potential for exclusionary behaviour, covering both contractual and technological restrictions</td>
<td>• Self-preferencing in adtech and specialised search • Restrictions on interoperability with Facebook • De facto requirement to use AMP and IA formats • Restrictions in syndication agreements</td>
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<td><strong>Objective 3: Trust and Transparency.</strong> the trust and transparency principles are designed to ensure that SMS platform provides sufficient information to users, so that they are able to make informed decisions.</td>
<td>• Changing how core services work without due notice (eg algorithms) • Lack of transparency in digital advertising (fees, verification) • Use of choice architecture to nudge users (eg consumers and advertisers) towards platforms’ preferred choices</td>
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Pro-competitive interventions

In addition to the code, we recommend the DMU have the power to introduce ‘pro-competitive interventions’ to transform competition in digital platform markets. While the key objective of the code is to mitigate the effects of market power, the pro-competitive interventions would aim to tackle sources of market power directly by overcoming barriers to entry and expansion.

- **Increasing consumer control over data**, which requiring platforms to give consumers the choice not to share their data and facilitating consumer-led data mobility;
- **Mandating interoperability** to overcome network effects and coordination failures;
- **Mandating third party access to data** where data is valuable in overcoming barriers to entry and expansion and privacy concerns can be effectively managed; and
- **Mandating data separation / data silos**, in particular where the data has been collected by the platforms through the leveraging of market power.
- **Default remedies**, powers to restrict the ability to secure default positions, to restrict the monetisation of default positions on devices and to introduce choice screens
- **Separation remedies**, powers to implement ownership separation and operational separation and to oblige parties to provide access to inventory on reasonable terms
Search and social media

We recommend that the DMU should have the power to:

• restrict Google’s ability to secure default positions, to restrict the monetisation of default positions on devices and to introduce choice screens
• require Google to provide click and query data to third-party search engines to allow them to improve their search algorithms
• to mandate interoperability for social media platforms – particularly for find friends and cross posting functionalities
Consumers value privacy and want control over their data, but many social media platforms do not allow consumers to turn off personalised advertising. Those platforms that do provide a choice use defaults and choice architecture that make it difficult for consumers to exercise this choice.

Under the choice requirement remedy, platforms would be required to offer consumers the choice of a basic service without personalised advertising. The DMU should also be able to approve the way in which the choice is presented, including whether the default is to allow personalised advertising or not. The platforms would be able to offer consumers incentives to accept personalised advertising, as this should both benefit consumers and help platforms manage potential revenue implications. Focus on platforms with SMS in the first instance.

The Fairness by Design duty would require platforms to design choice architecture in a way that encourages free and informed consumer choice. It would be subject to a rigorous trialling and testing and monitoring regime, to ensure it provides the intended support for consumers in practice. Focus on platforms with SMS in the first instance.
Separation to address conflicts of interest

• We think there is a strong case for the power to introduce separation and access interventions in the open display market.

• Google has the ability and incentive to prefer its own businesses in ad tech intermediation: Google’s strong positions in publisher ad serving, SSP and DSP, as well as its unique access to Google’s ad inventory, means that each of these businesses faces a conflict of interest potentially acting on the advertiser side, on the publisher side and on Google’s own account.

• We recommend that the DMU should have powers to implement ownership separation and operational separation.
Data-related remedies in digital advertising

- DMU should have the power to mandate data separation (or data silos) where it concludes that the adverse effects on competition outweigh any efficiency benefits.
- The DMU be given powers to introduce common user ID and data sharing interventions as they have the potential both to address competition concerns and improve the efficiency of digital advertising.
- The DMU could play a useful role in promoting data mobility in digital advertising. This could include setting standards; and providing safeguards.

We have identified three main options for improving transparency around fees and bidding data:
- Within-contract fee transparency – whereby data on fees, at least at an aggregate level, are provided to contracted parties.
- Publication of average take rate and other fees and charges – whereby intermediaries publish their average fee or take rates.
- Sharing of impression-level transaction and bidding data with advertisers and publishers (including the adoption of a common transaction ID).
Next steps

Our work leading the Digital Markets Taskforce is the next step in developing a framework for a regulatory regime for online platforms.

Proactive engagement and advocacy with our international counterparts.

Work with the Information Commissioner’s Office (ICO) on a number of areas relating to the interaction between data protection regulation and competition.

The CMA is currently actively considering possible cases in the digital sector.