

TO CMA COMPETITION AND MARKET AUTHORITY - UK

Ref: Big Tech – Unjust Enrichment - Antitrust and Appropriation of Consumers' assets . There is a barter with precise monetary values between Consumers and digital platforms . Consumers (knowingly or not) provide battery and bandwidth , the platforms provide the service. This exchange with a precise monetary value appears relevant for the relation between Users\ Consumers and the Companies in the online data harvesting and advertising business and also form the antitrust and tax law perspective .

Dear Sirs

This submission raises issues that are not explicitly discussed in the “CDR rules expansion amendments Consultation Paper September 2020” but that nevertheless appear relevant to the Consultation Paper .

Specifically

In proposing changes to the Rules, the ACCC has considered the likely effect of the Rules on:

- 1) consumers
- 2) promoting competition and promoting data driven innovation
- 3) management of consumer consents to collect and use data
- 4) increase Consumers' benefit
- 5) permitting accredited data recipients to disclose CDR data with a consumer's consent to third parties.

The above topics are addressed in this submission from the point of view of the digital markets for data harvesting and advertising .

As of today probably five billion mobile devices of which more than two billion are smartphones, uninterruptedly transmit data and receive ads .

Through continuous on line data harvesting and advertising a number of companies (their ceos , directors, owners etc.) acquired colossal wealth and power. More is piling up : in the next ten years the revenues of the online data harvesting and advertising industry will be in the order of the trillions dollars/euros.

The fortunes made by so called big tech in the last 15 years appear out of proportion.

Much of this money has been made by offering services defined or understood as "free".

The idea that money and power can be amassed by offering everybody goodies for free is suspicious and stirs curiosity as it counters the elementary principle of economic interaction by which “*nulli nisi ex alterius iniuria quaestus est*”.

In the current academic and public debate the key to this recent economic mystery appears to have been found as follows : “ not free at all , you pay online services with your data and attention to ads” .

Personal data and attention to ads versus an online service is an exchange that seems to make everybody happy.

No financial costs to Consumers and colossal fortunes to the industry.

A “disrupting” money machine.

Still not convincing.

There is a strong scent or reek of something more substantial, more tangible.

Scientific research finds the answer to the economic paradox apparently defining important aspects of the World economic environment at the beginning of this millennium, where it should be found : in the technology.

At closer scrutiny : “it turns out that ”free” comes at a cost that is paid through our interactions within a digital advertising ecosystem”. As an example : “an AT&T 300MB/\$20 plan subscriber using popular free apps (e.g.,

Dictionary in iPhone or Angry Birds Rio in Android) will spend 48% to 1299% more money than if using a purchased, equivalent app” .

This quotation is from one of tens of studies all (all!) coming to the same conclusions :

Consumers make a colossal contribution in real money to the industry of online data harvesting and advertising.

Consumers contribute to the online data harvesting and advertising industry from 20% up to 80% of the value of their data plans and of the value of the energy needed to recharge the Consumers' mobile devices that transmit the data and receive the advertising. Smartphones first of all, as a big part of the online data harvesting and advertising happens on smartphones.

In the online data harvesting and advertising system there is an ocean of money coming out of Consumers' pockets and going to big tech , small tech , middle sized tech. An ocean of money very rarely if ever mentioned in the public debate.

Probably nobody is happy to find out the hard tech-truth : oppss I'm paying big money for this supposedly free online service, plus – on top of the money - I provide personal data and attention to ads.

20 % to 80% of the value of data plans and energy of mobile devices, used up for sending personal data and receiving ads is a very huge contribution by Consumers to the industry. A contribution with a very precise monetary value.

Just for smartphones Consumers' contribution in battery and bandwidth to the fortunes of big tech might be well over 100 billion yearly only in the USA. If as science claims online ads serving and data harvesting consumes on average 60% of all data plans and energy in mobile devices.

In the UK the total numbers are necessarily smaller. The percentages remain the same as the technology is the same.

If 20 million smartphone users would spend 300 pounds a year for their data plan that would be 6 billion pounds yearly.

It would mean a battery and bandwidth yearly contribution to the industry of data harvesting and advertising by 20 million UK Consumers in the range from 1.2 billion (20%) to 4.8 billion (80%).

Plus the energy and the data and the attention to ads.

Quoting from the scientific research on the point : *mobile ads consume over 65% of communication energy and 23% of total consumption (including CPU, display, and communication)*^[1] and *“when the size of data transfer is small like the ad traffic, the percentage of tail energy is larger. It is shown that tail energy can contribute up to 48.2% of network energy consumption on mobile devices. Recent study even shows 89.2% out of the total cellular energy of 3G/LTE network is tail energy”*^[2]; and : *“with the median energy consumption, then the charge would last 2.1 hours instead of 2.5 hours. With the most expensive ad energy cost, this number decreases to 1.7 hours. This means that an end user would have to recharge their phone 33% more often to compensate for the most expensive ad's energy costs”*^[3]

The contribution of battery and bandwidth by Consumers in UK - as all over the World - represents free cash for the online data harvesting and advertising industry. Really free as there is not even a public debate going on the subject.

The industry can go promoting its own “disrupting” image without recognizing Consumers' financial contribution in any way. While the only real “disruption” happens in Consumers' pockets and bank accounts.

Also the common idea that personal data has not a precise monetary value is false .

Mainstream science has since long found out that the minimum monetary value for personal data is there and is very tangible.

The monetary value of personal data corresponds , in the minimum, to the value of battery and bandwidth devices consume when sending data to the platforms. Then there might be further value in data but the minimum monetary value is undisputable .

A very big monetary value by any estimate. Personal data has a hefty price tag on it . In real money.

The digital industry simply does not pay for it.

And has all the interest in keeping this colossal value out of sight as much as possible.

It is rather disappointing that this very tangible monetary value for personal data has not been recognized yet in the public –legislative- political debate and has been totally obscured by the debate on privacy.

The ongoing legal, social, cultural and political debate on privacy has produced egregious results but it seems that even more egregious results could come from recognizing the fact that personal data has a precise monetary value.

Just to give a few examples :

- 1) the value of the battery and bandwidth that the Consumer has to pay to send data to the online platforms collecting it, ought to be considered as a taxable base in all taxable transactions having data as an object.
- 2) Companies make an extra profit on online advertising by saving the cost of battery and bandwidth the Consumer has to pay when advertisement is “served” to her\his device. This extra profit has a relevance for antitrust laws.
- 3) The deal between Consumer and online service provider is a barter with a precise minimum monetary value , an exchange of battery and bandwidth for the service. It should be taxed as all barter are .
- 4) To be considered valid agreements between\among companies regarding directly or indirectly the operations of on line search and advertisement serving should probably consider if Consumers are clearly and conspicuously informed about their financial\monetary contribution to the business model.
- 5) Companies when providing their financial statements to Authorities controlling the securities\financial markets ought to be informed about the financial\monetary contribution of Consumers and it should be made clear that - such contribution stems from clear and conspicuous information
 - Indicating the clauses in the terms of use where such (colossal) contribution and exploitation of Consumers ownership of battery and bandwidth is explained clearly and conspicuously to Consumers
 - making clear that there are or there are not any legal risks for possible demands of disgorgement or restitution in relation to such exploiting of Consumers business battery and bandwidth in the business model of the companies in the industry of online data harvesting or advertising.

Apparently no research has been done in the UK on the relevance of the exploitation of Consumers battery and bandwidth by the current business model of the on line advertising and data harvesting industry to :

The Law of Antitrust.

The tax Law

The Law of Unjust Enrichment and Restitution

The Law of Securities

Battery and bandwidth worth billions of pounds is bartered for online services and no questions asked?

Disrupting for sure, not only to Users\Consumers but probably to UK’s public finances as well .

Authorities in the UK - as Authorities all over the World - appear to have a very clear interest to check on the issue.

I could find not one single scientific study disputing in any way the fact that an enormous amount of User\Consumers’ battery and bandwidth is used up for sending personal data and for receiving advertisement to and from on line companies , specifically to the big tech platforms. My search has been as scrupulous and active as in my possibilities.

But a researcher's effort is one thing while only a national Authority could have the resources to conduct a thorough and definitive survey on the subject for the specific national market.

For the UK it seems it could be important to check how many billions of pounds worth of battery and bandwidth Consumers contribute yearly to the online industry of data harvesting and advertising

Such research by CMA would appear important for policy makers and the public, regardless of the fact that the online companies' terms of use can or cannot be read as implying a consent by Consumers to pay with their battery and bandwidth for the online advertising and data harvesting .

The terms of use of the companies providing online services often appear not to give give a clear and conspicuous information about the monetary costs Consumers incur when PII is collected and ads served.

Should this be the case also for the terms of use currently in the UK it could very well be that also in the UK companies providing online services violate the ownership rights of Consumers on battery and bandwidth.

It could also be that by UK Law profits and advantages so hoisted should be qualified as *unjust enrichment* and disgorged .

But quibbling in the reading of clauses in the terms of use is normal and Companies providing online services very likely would claim – in the UK as everywhere else - that Consumers are informed on the costs they incur into for sending PII and receiving advertisements.

Nonetheless it appears very bizarre that the public debate does not mention the predicament of Consumers that pay so much for sending data and receiving advertisements.

It is also bizarre that no alternative service has appeared on the market offering to give back a part of the value of battery and bandwidth Consumers contribute to the businesses providing online services.

The opening of a public debate on the point by CMA could in fact foster competition and the entrance of new players in a digital market that appears to be clinched by very few players making colossal extra profits.

In the end it appears important that CMA investigate how the issue of the exploitation of UK Users\Consumers' battery and bandwidth in the business model of the online data harvesting and advertising industry affects the digital markets from the many possible perspectives : tax law , antitrust, misappropriation of Users\Consumers resources .

Sincerely

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PRASHANTH MOHAN, SUMAN NATH, ORIANA RIVA, “Prefetching mobile ads: Can advertising systems afford it?” at 270.

[¹]JOHN A. COPELAND, ” at 2142. See also note 77 quoting LI ZHANG + 2 , “How expensive are Free Smartphone Apps?” In *ACM SIGMOBILE Mobile Comput. Commun. Rev.*, 2012, vol. 16, no. 3, at 21–32.; qurinet.ucdavis.edu/pubs/journal/Li-2012.pdf. At 21 :“As part of our study, we identify two primary classes of overhead traffic, i) advertisements or ads, and ii) analytics. Ad traffic pertains to the data that belongs to the text, image, audio, or video-based ads that are displayed or played when the smartphone app is being used (Figure 2). Analytics refers to the portion of smartphone app traffic that is transmitted to a third-party server specifically for the purpose of collecting data that can be used to analyze app popularity or user behavior. We contend that neither of these classes of traffic is absolutely required for the functioning or use of the associated smartphone app, and hence we classify this traffic as overhead.”

^[2] [YONGBO LI](#) + 2 *Mobile Ad Prefetching and Energy Optimization via Tail Energy Accounting*, in [IEEE Transactions on Mobile Computing](#) (*Early Access*), 04 October 2018. , *IEEE digital library*: “Current app marketplaces are increasingly dominated by free apps relying on advertising for revenue. Ad modules have become one of the major energy drainers on mobile devices, taking up 65% of apps’ total network energy, or 23% of an app’s overall energy [1]. This inefficiency mainly comes from the fact that mobile apps typically refresh their ads every 12 to 120 seconds [2], resulting in frequent, small transmissions. Since network interfaces often remain in full power state and intermediate state for a certain length of time after data transmission and before transitioning to idle state e.g., 5 to 6 seconds in full power state, and 11.5 to 12 seconds in intermediate state in 3G [3] and LTE networks [4] – for the purpose of improving network responsiveness, such ad traffic causes network interfaces to constantly stay in full power or intermediate states, leading to considerable energy drain, commonly known as the tail energy. ”

^[3] See [JIAPING GUI](#) + 3, *Truth in Advertising: The Hidden Cost of Mobile Ads for Software Developers*. [ICSE \(1\) 2015](#): 100-110, at 105.