Regulations on Digital Market: Transforming the Horizons of Competition Policy

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Abstract

The misuse of data and more specifically personal data of people is a topic that has been vigorously debated upon for the past few years especially since the Cambridge Analytica case.[1] The case was in relation to the Facebook-Cambridge Analytica axis which exposed a huge data scandal in 2018 which was in connection to the harvesting of private data off Facebook to influence the voters in their decision making process when it came to the 2016 U.S elections. This paper focusses on analysing the Tech companies and their mining of consumer data using Big Data and AI. The primary focus is on how the companies use Big data in a manner which could lead to potential anti-competitive practices and how the Competition Act, 2002 has a narrow and offline understanding of companies and the marketing policies they use which raises the need for the act to be in tune with the digitalised economy of today where Data is the new oil. In the digital world, the strategies of companies pertain more towards the collecting, analysis and usage of personal information of consumers. This opens up the scope for Tech companies to misuse data in order to have an appreciable adverse effect on the market in order to target consumers using this information for better results. Hence there is a definite need for a stricter regulation policy to regulate competition in the digital space.

Introduction

There is no explicit definition of the term "market" in the Competition Act, 2002. However the act does define 'relevant market', 'relevant geographic market' and 'relevant product market'. The term relevant market according to the act is the market which is in reference to the relevant product market or the relevant geographic market or with reference to both the markets.[2]

What we understand from the different definitions and terms as stated above is the fact that Competition Act of 2002 has defined and put across the meaning of a market in a way which is inclined towards a more offline understanding when it comes to interpretation of the law. This brings to a key component of this analysis that is the difference between offline marketing methods and online methods and why it is important to be aware of the same when it comes to the Competition Act of 2002.

[1] Julia Carrie Wong, *The Cambridge Analytica Scandal changed the world- but it didn't change Facebook*, The Guardian, https://www.theguardian.com/technology/2019/mar/17/the-cambridge-analytica-scandal-changed-the-world-but-it-didnt-change-facebook.

[2] Competition(Amendment) Act,2002, No.12,Acts of Parliament, 2002(India).

When we talk about offline marketing methodology[3], we refer to conventional and traditional methods of marketing used by companies wherein they would notify consumers about their products by using means such as advertisements through the radio, television, press, posters, pamphlets, hoardings etc.

This was the main method of marketing until 2010-2011, following which the technological boom in the country and especially the accessibility and affordability of smartphones to the people in India post 2012, represented a major shift in terms of how companies could target their consumers directly using the internet and the various digital marketing methods that have emerged since then which is aided by the emergence and rapid development of social media websites and applications such as Facebook, Twitter, Instagram and YouTube to name a few platforms.

The priority shifted from manpower in terms of sales and marketing representatives to mining consumer data in a gradual yet progressive manner which was helped by the meteoric rise in the number of smartphone users. As per an article posted by Business standard, "As of 2017, the number of smartphones in the country stood at 468 million and likely to reach 859 million smartphones users by 2022."[4] This goes to show and represent the potency that companies can have in terms of direct contact with their consumers in an online market that is only growing from strength to strength.

The Competition Act of 2002 deals with companies through an offline interpretation of the word market. There's no scope for interpretation of the law in a way that would help to deal with the mining of consumer data and the subsequent misuse of it in order to gain an advantage in the market. This advantage creates an appreciable adverse effect on the market which helps benefit the company indulging in misuse.

The term 'Appreciable adverse effect' is used under section 3(1)[5] of the act to explain the fact that any anti-competitive agreement, which has an impact on the market in a way which can be estimated such that it shows that there is detectable impact on the competition, is what we can call as 'Appreciable adverse effect' on competition.[6]

Tech companies have a unique way of mining consumer data whereby they use Big data analytics[7]. What generally happens is that these techniques are used to garner large amounts of consumer data off social media websites and various other e-commerce websites and applications in order to stack up and analyse the data in a

[3] Difference between offline and online marketing, Just Great database, https://jgdb.com/business/marketing/types-of-marketing/what-is-offline-marketing-difference-between-online-and-offline-marketing.
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[4] *Number of smartphone users likely to double*, Business Standard, https://www.business-standard.com/article/news-cm/number-of-smartphone-users-in-india-likely-to-double-to-859-million-by-2022-119051000458_1.html.

[5] Competition(Amendment) Act,2002, No.12,Acts of Parliament, 2002(India).

[6] Ratan Deep Singh, *Adverse effect under Competition law*, Finology Blog, https://blog.finology.in/Legal-news/Adverse-Effect-under-Competition-Law.

[7] *Big Data Analytics- What it is and why it matters*, SAS, https://www.sas.com/en_in/insights/analytics/big-data-analytics.html.

manner which filters through any excess or repetitive information and then identifies relevant consumer patterns and interests which helps in predicting likely outcomes in relation to consumer preferences.

Tech Companies and Anti-competitive Agreements

Section 3 of the Competition Act, 2002[8] talks about anti-competitive agreements and how any enterprise or person or association of persons shall not be permitted to enter into agreements that causes an appreciable adverse effect on competition in India in relation to production, supply, distribution, storage, acquisition or control of goods or provision of services.

The way the act defines and explains anti-competitive agreement is with a narrow perspective which is definitely not adapted to the digitalized economy in relation to Tech companies and how they use data to target consumers and it highlights how there is scope for the act to include restrictive measures in order to prevent the misuse of data of the consumers.

When it comes to companies and their mining of data, as stated earlier they rely on two methods i.e. AI and Big Data. Big Data is the most crucial method of collecting information on the part of these companies. Data is generally accumulated and stored on part of a company's assets, products and its services with regards to the use on part of the consumer. This data is collected and used by the company for different purposes. However, data can also be purchased as a product and in this case it's referred to as third party data as opposed to first party data which is collected directly.

When it comes to data and viewing it as a property right[9] to provide more protection from exploitation, the approach is to treat it as a bundle of rights in the information property vested as intellectual property but to ultimately treat it as valuable property without stretching the concept to the extent of monetisation of personal data. It is believed that such mechanism would provide control on the use of personal data without negating the data processors expectations towards the use of the data.

When it comes to barriers to entry, Section 4 of the Competition Act, 2002[10] while explaining the abuse of dominant position, refers to the unfair or discriminatory practice of denial of market access(in any manner) under Section 4(2)(c) wherein any enterprise or group of enterprises cannot use their dominant position in the market in a manner which creates a barrier of entry to other competitors resulting in an abuse of dominant position.

It is a similar situation when it comes to Tech companies such as Google, Apple, Samsung, Microsoft, Facebook etc. They are in a position wherein they can easily create a barrier for entry for smaller companies trying to enter

[8] Competition(Amendment) Act,2002, No.12,Acts of Parliament, 2002(India).
[9] Atul Singh, *Protecting Personal Data as a Property Right*, ILI Law Review, Winter Issue, 2016.
[10] Section 4, Competition(Amendment) Act,2002, No.12,Acts of Parliament, 2002(India).

the market in a situation wherein they are unable to collect or buy access to the same kind of data that these established and dominant companies have access to.

The essentials of an enterprise enjoying a dominant position is dependent on certain factors enlisted under Section 19(4)[11] of the Competition Act, 2002 which names the factors as-

a. Market share
b. Size and resource of the enterprise.
c. Size and importance of competitors.
d. Economic power of enterprise including commercial advantages.
e. Vertical integration of enterprises or their service network.
f. Dependence of consumers on the enterprise.
g. Monopoly or dominant position acquired as a result of statute or by virtue of being a government company or public sector undertaking.
h. Entry barriers.
i. Countervailing buying power.
j. Market structure and size of market.
k. Social obligations and costs.
l. Advantage by way of contribution to economic development.
m. Any other factor that maybe considered relevant.

The Tech companies stated above are definitely fulfilling majority of the essentials stated above which goes to highlight how they can create barriers of entry for any new entrants with the amount of data resources that are available to them.

The Competition law in India in relation to Tech Companies

The technology sector in India has seen tremendous change and development in the past 7-8 years in relation the smartphone boom in India. Over the course of these 7-8 years, the CCI has dealt with quite a few cases in relation to Tech Companies.

The preamble of the Competition Act of 2002 mentions its objectives as the preventing of practices which may have an appreciable adverse effect on competition, the promotion and sustaining of competition, protecting the interests of consumers and ensuring the freedom of trade. All these objectives which are covered under the preamble of the act are under serious threat as internet and Tech based companies have evolved into dominant economic entities.[12]

[11] Section 19(4), Competition(Amendment) Act,2002, No.12,Acts of Parliament, 2002(India).
[12] Competition(Amendment) Act,2002, No.12,Acts of Parliament, 2002(India).

In the Uber-Ola case,[13] the issue brought up by the complainant was that the algorithmic price methodology took away the competition between drivers and hence was indicative of price fixing. The case was dismissed by the CCI with the reason being given that Uber and Ola being taxi companies, were distinctive from other online platforms which provided a list of different options from which consumers could choose from unlike Ola and Uber whose end product was the same i.e. taxi services.

In the recent years, the use of big data technology has been a huge asset to Tech companies and the various market players. With the shift towards a digitalized economy with the emergence of E-commerce, there has been rapid development in the usage of data procured from consumers in order to predict their preferences and provide an advantage to the various market players keen to gain an advantage over their competitors.

In 2007, Google had set the ball rolling when they reached an agreement to acquire the company 'Double Click'[14], which was a huge advertising company in terms of display advertisements on various websites on the internet. What this did was it opened a pathway for Google to have access to consumer information which had been accumulated by Double Click. Although concerns were raised by Peter Swire, a former White House privacy official and also someone who was a member of President Obama's review group on Intelligence and Communications Technology, the Federal Trade Commission of the United States at the time said that there was no jurisdiction to associate this acquisition with antitrust. This was despite the concerns raised in relation to Google's acquisition which would enable it to understand web browsing behaviour of individuals which would allow them to identify patterns of consumer preferences.[15]

Facebook announced its acquisition of WhatsApp in 2014[16] which was again approved of by the US FTC and the EU. Despite concerns being raised, both the FTC and the EU said that any privacy related concern with regards to mining of data doesn't fall within the scope of competition law but instead it only falls within the scope of data protection laws.[17] This shows the recurring trends of turning a blind eye towards how Tech companies can misuse data in order to have an appreciable adverse effect on competition.

[13] Case no.37 of 2018, Competition Commission of India.
[14] Louise Story and Miguel Helft, *Google Buys DoubleClick for $3.1 Billion*, The New York Times, https://www.nytimes.com/2007/04/14/technology/14DoubleClick.html.
[15] Vishal Singh , *Perceiving Data Protection under the umbrella of Competition Law*, IndiaCorpLaw, https://indiacorplaw.in/2018/11/perceiving-data-protection-within-umbrella-competition-law.html.

[16] EduPristine, *Analysis of Facebook's acquisition of Whatsapp*, EduPristine, https://www.edupristine.com/blog/facebook-acquisition-whatsapp.
[17] Press release, *Commission approves of Facebook acquisition of Whatsapp, European Commission*, https://ec.europa.eu/commission/presscorner/detail/en/IP_14_1088.

Google's Abuse of dominant position

Googles unfair practice of ensuring google apps came preinstalled in all Android phones, was ordered a probe into this misuse of their position being dominant in the market by the Competition Commission of India[18] on July 1, 2019 for the violation of section 4 of the Competition Act 2002,for abuse of dominant position.

Google in this case has been accused for indulging in practises that are anti-competitive in nature in the mobile operating systems market even though the case commenced in 2012 with the CCI as a case against the Internet conglomerates unfair search results.

As it is already established that Googles operating system is widely used by a majority of users, in addition to other varied devices like Google Mobile Services (GSM). A wide number of apps like YouTube, Chrome , etc. could be used only through GSM which as mentioned above was forced on manufactures to already have installed. Moreover, the Anti Fragmentation Agreement (AFA) and Mobile Application Distribution Agreement (MADA) had to be interred into.

This case is similar to the one which Google had to face in Europe and had to pay a fine of $5 billion for manipulating all manufacturers of Android devices to ore-install Google applications. This prima facie leverage by the company clearly amounted to dominance, by making it conditional for the pre-installed apps.

In lieu as to what could happen in the Indian case, we are aware of the fact that CCI has the power to fine a company a penalty which could be up to 10% turnover of the said company in the last three financial years.[19]

In 2006, a mathematician by the name of Clive Humby came out with the famous quote that is data is the new oil. This quote however, was amplified and enhanced in an article by The Economist[20] which came with a new perspective that since oil was a limited resource, it was actually unfair to make the comparison to data considering that is a resource with infinite capacity fuelling Tech Companies in their indirect endeavour to create a data monopoly.

It is very evident that data is a significant factor for these companies in determining market power. The Competition Act of 2002 doesn't consider or cover any of the above circumstances when it comes to dealing with data mining and its misuse by companies. There has been no amendment made to the act in order to deal with potential anti-competitive agreements on the part of Tech Companies.

[18] Case no.07 and no.30 of 2012, Competition Commission of India.
[19] Section 27(b), Competition(Amendment) Act,2002, No.12,Acts of Parliament, 2002(India).
[20] *The world's most valuable resource is no longer oil but data*, The Economist, https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data#.

Position of EU Antitrust laws in relation to Tech Companies and Data Mining

Antitrust authorities in Europe and U.S.A believe that a large volume of data accumulated by the established Tech companies could result in potential entry barriers for new entrants. They are afraid that the collection and mining of data on part of these companies over the past decade could lead to a monopolization of data markets. It is acknowledged that big data can reduce entry barriers but only if the new entrants deploy new methods of collecting big data.

The concept of Big data[21] is that it is the accumulation of large, diverse set of information which grows at an upward trajectory that is the volume of information, velocity or speed at which it is created and collected as well the variety and scope of the data being covered. It is an infinite resource which only increases in size with accumulation and time. It can be structured or unstructured. It consists of information accumulated by companies in their databases. It can be gathered from publicly shared comments on social networks and other websites, voluntarily collected from gadgets and their app through questionnaires, product purchases and other activities on behalf of the consumer. The sensors and other inputs in devices such a smartphones can also gather big data.

Case Study

In March 2019, Google was fined 1.49 billion Euros for abusive practices in online advertising. The European Commission sanctioned the fine after Google was found to be in violation of the EU antitrust rules. [22]
Google had deployed a strategy since 2006, wherein they included exclusivity clauses in their contracts. Meaning the publishers couldn't place any search adverts from certain competitors on their search results page. In March 2009, Google began the "Premium Placement" clauses, meaning publishers had to reserve the most profitable space on their search results page for Google Ads. This again proved to be an obstacle for Google's competitors in placing adverts in the most visible parts of the Google's search results pages.

So to summarise, Google first used an exclusive supply obligation strategy to create an obstacle for their competitors and then followed it up with a relaxed exclusivity strategy which created a unique reservation for their own adverts.
In using this strategy, Google covered half the market by turnover throughout the entire period.
These practices was found to be amounting to an abuse of Google's dominant position in the online search advertising intermediation market wherein Google as a platform was the intermediary. During this period, Google amassed a market share over 85% while simultaneously creating market barriers for their competitors.

[21] Antitrust risks and Big Data, Norton Rose Fulbright, https://www.nortonrosefulbright.com/en/knowledge/publications/46e9ae4f/antitrust-risks-and-big-data.
[22] Press release, Commission fines Google 1.49 billion euros for abusive practices in online advertising, European Commission, https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1770.

Google was found to be in violation of article 102[23] of the TFEU i.e the Treaty on the Functioning of the European Union and article 54[24] of the EEA agreement, both articles prohibiting the abuse of dominant position.

It was concluded by the European Commission that Google was guilty of illegal misuse of its dominant position in the market for the brokering of online search adverts and that it shielded itself from competition by using anti-competitive contractual restrictions on third party websites.

Analysing the Franco-German report on data and its implications for competition law

This report[25] was published on May 10, 2016 by the French Competition Authority(FCA) and the German Bundeskartellamt (BKA). The report spoke about the implications and challenges for competition authorities in relation to data collection in the digitalized economy.
This report was not intended to provide a declaration or a conclusion as to how data and competition law were to interrelate but instead help in identifying the key parameters that need to be considered in the interconnection between data, market power and competition law.
The report's main area of focus was merger control and data-based conduct by dominant companies.

According to this report, there are two main factors that need to be considered while trying to establish data contribution towards a company's market power, i.e the scarcity of data or the ease of its replicability and the scale or scope of the data collection and its significance to a company's competitive performance.

It's been recognised that competition assessment has to be supported by refined case related considerations. This report serves to be a useful tool in terms of data related antitrust probes. The Franco/German report points towards the fact that wherever there is access to large volume or variety of big data, it is imperative in ensuring competitiveness of that particular market as the potential for data collection resulting in entry barriers is relatively high. There is a huge chance that this barriers may result in new market players being unable to collect or buy access to the same kind of data as that of the established companies. It is assumed that big data practices are a source of market power whenever they lead to or give rise to entry barriers in a particular market.

When it comes to first-party data collection, no two companies can have an identical data set as each company has its own unique data base. Big data is collected and used for product development for the company. A dataset of one company doesn't necessarily create an barrier of entry for another. It is when a company that has been established and in operation for several years accumulates a plethora of data, is when the potential for entry barriers significantly rises.

[23] Article 102, TFEU, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:12008E102.
[24] Article 54, EEA, http://www.eftasurv.int/media/documents/Article-54.pdf.
[25] Franco-German Study on Competition Law and Data, Franco/German study on Competition Law and Data, 10 May 2016.

In reference to the European Court of Justice's judgement in the Microsoft, IMS and Bronner case,[26] it was held that an authority can order a company to give a competitor access to an essential facility if the refusal to grant access when it concerns a product which is indispensable for the business of the company, when it prevents the emergence of a new product with a potential consumer demand, when it is not justified by objective considerations and it is likely to exclude all competition in a secondary market. A product or service is indispensable only if there isn't any viable alternative. Taking this case and relating to the current data collection issues, the Franco-German study says that the ownership of data is truly unique and that there is no possibility for a competitor to obtain the same data resource for its own services.

The Franco-German study talks about five types of conduct with regards to big data which leads to exclusionary practices:-

1. Refusal to provide access to data
2. Discriminatory access
3. Exclusive contracts
4. Discriminatory pricing
5. Tied sales and cross-usage- Use of data leading to anti-competitive foreclosure

It was concluded that antitrust authorities will need to look more closely at the substitutability of different types of data and look for distinct factors such as algorithms and other data processing software. Creating a broad access obligation could lead to a relaxed atmosphere for innovation and investment in a critical period for evolution of data practices.

The need for amendment in the Indian competition law to adapt to the digitalized economy

All the various cases and instances in the past decade have been a huge indicator towards the fact that big data can potentially result in companies indulging exclusionary conduct which was clearly highlighted in the Google case of 2019 wherein they were fined 1.49 billion euros.

In 2017[27], Google was also fined 2.42 billion euros by the European Commission for abuse of dominance as a search engine giving an advantage to a product of Google which is its comparison shopping service called 'Google shopping'. In 2018, Google was fined 4.34 billion by the European Commission for anti-competitive practices regarding Android devices to strengthen Google's search engine.

Use of Big data by Tech Companies also leads to potential foreclosure of the market by making it difficult for consumers to use or adopt alternative platforms belonging to their competitors.

[26] Christian Ahlborn and David S. Evans, *The Microsoft Judgment and its Implications for Competition Policy towards Dominant Firms in Europe*, Semantics Scholar, https://pdfs.semanticscholar.org/293d/f458bf6423d88987e5e1126088ad9196fa87.pdf.

[27] Press release, European Commission, https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1784.

Horizontal agreements in relation to cartels can be formed with regards to digital price fixing as shown in the Ola-Uber case in terms of the concerns of the complainant. There is a real concern in relation to profit maximising algorithms. The Indian High Courts have adopted a stance of excluding the CCI from sectoral regulations which makes it even more difficult for there to be regulation of Tech Companies.[28]

Data analytics by companies can also be used for anti-competitive practices such as resale-price maintenance. In the CCI's WhatsApp case[29], wherein a C.A by the name of Vinod Kumar Gupta filed a complaint alleging that WhatsApp had taken deceptive consent for the its change in privacy policy post acquisition by Facebook, predatory pricing due to funds being sourced from Facebook which changed WhatsApp's charges from $0.99 to a free subscription and an allegation that sharing of data on part of WhatsApp was in contravention of the IT Act.

It was held by the CCI that although WhatsApp held a dominant position in India in the instant messaging market, there was no case for abuse of dominant position. It was held that the privacy concerns raised didn't fall within the ambit of the Competition Act, 2002.

All these instances point towards a growing concern and rise in issues in relation to Tech Companies and Big data. The OECD[30], in its executive summary of Big Data: bringing Competition policy to Digital era says that Big data usage by companies has to be incorporated into competition law in order to treat data as an asset that companies use to enhance their market power and potentially engage in exclusionary practices. It is important to consider the impact of Big Data on the quality dimensions of competition in relation to appreciable adverse effect on competition. Failures in digital markets may require regulatory response to promote market trust amongst consumers. Hence it is imperative that the Competition Act needs to be amended to adapt to the digital era in relation to Tech companies and big data.

Conclusion

The legal system in many cases adapts to situations after they have arisen, in a prospective manner. Big data is an asset which is growing exponentially, due to its technological and digital basis, and hence requires regulation at every stage, so as to prevent its misuse. It is clear that enterprises can utilise big data in order to achieve greater market power and competitive advantage. Mergers and acquisitions may also be premised on data merging, which can be very advantageous to the enterprise.

[28] Paridhi Poddar, *Sectoral regulations, Competition law and Jurisdictional overlaps: Tracing the most viable situation in the Indian context*, Kluwer Competition Law Blog, http://competitionlawblog.kluwercompetitionlaw.com/2018/05/24/sectoral-regulation-competition-law-jurisdictional-overlaps-tracing-viable-solution-indian-context/.

[29] Case no.99 of 2016, Competition Commission of India.

[30] Executive Summary, OECD, https://one.oecd.org/document/DAF/COMP/M(2016)2/ANN4/FINAL/en/pdf.

In India, innovation and tech driven markets are growing rapidly due to its potential scope as well as various promotions. Internet of things and the convenience it provides to users is being rapidly integrated into our society and its benefits are being reaped consistently. This has led to a greater inflow of data which encompasses various parameters. Performing analytics on real, collected data can prove to be extremely worthwhile to enterprises, and will definitely provide a competitive edge.

As far as the Competition commission of India is concerned, it may be an expedient time for it to get involved and perform inquiries into Big Data and its impact, as well as anti-competitive prevention measures taken by other nations. Moreover, the commission has chosen to exclude privacy issues from its ambit. It is well established that violation of data protection principles may lead to abuse of dominance. The fact that CCI chose to exclude data protection and privacy concerns from its ambit may indicate a jurisdictional conflict between the Information Technology Act, 2002 and Competition Act, 2002.

The Franco- German report provides for measures which can aid the inclusion of data and its implications under the purview of Competition Act 2002. While the pathway may seem a bit hazy, it is only a matter of time before the commission brings the collection and analysis of big data into its scope of enforceability.