NETWORK EFFECTS AND DOMINANCE: THE EVOLVING APPROACH OF THE CCI

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ABSTRACT

The rise of the internet and mobile phones led to the development of platform markets which now play a predominant role in the sale of goods and services. Originally starting as simple business-to-consumer platforms, many platforms have morphed into vast and complex arrays of businesses, intermediaries and customers – commonly known as platform markets. The said markets are characterised by the presence of direct and indirect network effects. Owing to the said network effects, the structure of many digital markets is not conducive to long term competition and they are prone to becoming winner-take-all markets. Many competition regulators including the Competition Commission of India [“CCI”] have often grappled with antitrust issues in platform markets. While the CCI had originally adopted a non-interventionist stance, its approach has undergone significant change in recent times, and the CCI is currently investigating multiple instances of abuse in the digital sector. Similar investigations have also been launched globally by various other regulators. There are growing voices that advocate that many platform markets have grown too large and are no longer conducive to a free and fair market. Accordingly, remedial measures such as ex-ante regulations and stronger merger reviews are proposed. However, any intervention in the market must be circumspect lest corrective measures end up causing more harm than they seek to prevent.

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I. INTRODUCTION

Despite being invented in the 1960s, the internet revolution truly took hold in the mid-1990s. With the launch of the Netscape browser and cheap affordable internet, the average household in the developed world could finally access the internet from the comfort of their homes. Since then, the internet has had a tremendous impact in shaping popular culture and the way we do business. E-mails and instant messaging revolutionised the way in which people interacted with one another. Later, discussion forums, social media websites and blogs began acting as platforms where people with similar interests could converge and share ideas.

While the use of the Internet was originally geared more towards professional and personal communications, over time, with the advent of online shopping websites, the internet also became a medium for bringing businesses and customers in direct contact with one other. The rise of smartphones further quickened this development and gave rise to platform markets. Nowadays, the internet increasingly plays a predominant role in the sale of goods and services – the ability to uniquely tailor user experience and advertisements is seen as a strong tool in retaining customers and generating repeat business. Digital marketplaces have completely changed the way in which business is conducted and forming appropriate strategies becomes a key component in ensuring the success of any product or service.

The basic core function of a marketplace is to synchronise demand and supply and ensure smooth flow of information between users.\(^1\) Therefore, at the time of its genesis, it was presumed that the fall of distance barriers between consumers and retailers would bring markets closer to a perfect competition paradigm.\(^2\) Irrelevant searching costs and consumers’ ability to compare prices was seen as a catalyst to lower and more uniform prices and increased competition.

II. DEVELOPMENT AND FEATURES OF DIGITAL MARKETS

However, the development of the internet and its associated marketplaces was not along expected lines. Originally starting as simple business-to-consumer platforms, many digital platforms morphed into vast and complex arrays of businesses, intermediaries and customers – commonly known as platform markets. Characterised commonly by the presence of direct

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and indirect network effects, platforms markets are two-sided markets which offer different products and services on each side of the market. As traditional methods of antitrust analysis focus primarily upon single-sided markets, understanding and analysing these multi-faceted markets has proven to be challenging.

At a basic level, digital markets evolve at a fast pace with pressure on market incumbents from new entrants/innovators to continue innovating or risk losing out due to obsolescence of their products/services. These market pressures result in increased expenditure towards research and forces firms to continuously improve their products. However, in the absence of such pressures, incumbents lack the incentive to continuously invest and innovate.

The absence of pressure to innovate is often linked with a lack of competition. The importance of competition in digital markets cannot be overstated. Its impact goes beyond mere innovation and utility. As many platforms in digital markets do not charge users directly for their services, these platforms often compete on quality of service. Lack of competition on any such platform then has a direct bearing on the quality of the services offered. There is a growing body of evidence that there exists a direct correlation between lack of competition and degradation of service.

It has been an observable trend that the structure of many digital markets is not conducive to long term competition and that they are prone to become winner-take-all markets. This is primarily on account of unique features including network effects, switching costs, economies of scale and scope, advantages based on access to data, etc. Consequently, many digital markets tip in the favour of a particular firm. This is further exacerbated by high entry

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4 ibid.
7 ibid.
barriers which further undermine the ability of potential competitors to successfully compete in the market.\textsuperscript{10}

III. \textbf{COMPETITION COMMISSION OF INDIA’S APPROACH TOWARDS NETWORK EFFECTS AND DIGITAL MARKETS}

The CCI has often grappled with the issue of abusive practices in the digital sector. Its jurisprudence has continuously evolved over time to keep pace with this rapidly evolving sector. The CCI was initially of the opinion that the digital markets are at a nascent stage of development and any intervention in such markets needs to be carefully crafted lest it stifles innovation. However, from an initial hands-off approach, the CCI is increasingly taking an interventionist stance keeping in mind the pitfalls of non-intervention at crucial stages and possible tipping points in these markets.

In 2016, in the case of \textit{Deepak Verma v. Clues Network & Ors.}\textsuperscript{11} the CCI while dismissing allegations of deficiency in service and unfair trade practices against various e-commerce companies, observed that consumers are not dependent on a single e-commerce player and can switch to another e-commerce player without incurring significant costs in terms of time, money and convenience, etc. It stressed on consumer choice acting as a deterrent preventing e-commerce players from dictating unfair terms and conditions.

Presence of consumer choice was also taken into consideration by the CCI while dismissing abuse of dominance allegations against WhatsApp in the case of \textit{Vinod Kumar Gupta v. WhatsApp Inc.} in 2017.\textsuperscript{12} The CCI noted the existence of \textit{multi homing}, low price and minimal switching costs amongst consumer communications app like WhatsApp and observed that while WhatsApp appeared to be dominant in the ‘\textit{market for instant messaging services using consumer communication apps through smartphones in India}’, the allegations levelled against it had no substance. Notably, an analysis of network effects and their impact on market dynamics was absent in this case.

For the first time, in 2017, the issue of network effects and their impact on competition was dealt in detail by the CCI in the case \textit{Fast-Track Call Cabs and Anr. v. ANI Technologies Pvt. Ltd.}\textsuperscript{13} The CCI observed:

\textsuperscript{10} ibid.
\textsuperscript{11} Order dated 26.07.2016 in CCI Case No. 34 of 2016; 2016 SCC OnLine CCI 42.
\textsuperscript{12} Order dated 01.06.2017 in CCI Case No. 99 of 2016; 2017 SCC OnLine CCI 32.
“In two-sided markets, network effects may enable a large platform/network to become dominant and insulate itself from potential competition as entrants may find it difficult to challenge the large incumbent....”

The CCI in this case noted that network effects are often corelated to the size of an enterprise. Competition in platform markets during the initial period of development is focused on increasing the size of the userbase. Later, once the market settles in favour of a few enterprises, the strength of network effects becomes a key factor in the determination of dominance. Further, the CCI also noted the likely possibility of cross-side network effects influencing both sides of the market and creating a feedback loop in favour of the incumbent. Furthermore, it noted that network effects may act as an entry barrier in the relevant market depending upon various factors. However, in this case, ability of both customers and drivers to *multi-home* and low switching costs were noted as factors which prevented network effects from acting as entry barriers.

In 2018, the case of *Matrimony.com v. Google & Ors.*[^1]^ is the first case in which a technological giant was penalised by the CCI for abusing its dominant position. The allegation levied against Google stated that Google was running its core business of search and advertisement in a discriminatory manner by incorporating a search bias and displaying Google’s native offerings in a preferential manner. Further, it was alleged that Google imposed unfair conditions on its advertisers and restricted competition via its distribution and intermediation agreements. The CCI delineated two separate relevant markets as ‘market for Online General Web Search Services in India and market for Online Search Advertising Services in India’ and found Google to be dominant in both on account of its huge scale advantage, prohibitive costs for new entrants, high market shares and technological superiority. The CCI also made certain interesting observations during its analysis, it referred to the ‘special responsibility’ vested in Google on account of its role as the gateway of the internet for a vast majority of users. It also noted the influence Google exerts in ensuring fairness of the online web search and search advertising markets. Google was found to have abused its dominant position by displaying its own services prominently in search results and indulging in search bias and imposing unfair terms while negotiating intermediation agreements.

A key takeaway from this case was the deep analysis of the market structure undertaken by the CCI. It noted that particularly in the digital economy, players with a strong market position enjoy a virtual hegemony due to the ‘winner-takes-all’ phenomena. Further, network effects were recognised as a key contributor in sustaining a positive feedback loop whereby new users are attracted to a platform due to the strength of its existing userbase. These network effects also raise switching costs for users and act as barriers preventing entry of potential competitors. The CCI also noted that online markets now cover an increasingly large spectrum of commercial activities and wield substantial market power over all participants.

Moreover, the CCI also discussed the possible modes in which conducive regulatory intervention in the digital sector may be achieved. It noted that market power in itself is not an antitrust concern; rather, it is the conduct of the enterprises which must be scrutinised. Therefore, only in cases where it is shown that a dominant enterprise is using its market power to stifle innovation and/or competition require regulatory intervention. Stress was also placed on the fact that intervention should be based on evidence instead of perception.

In 2018, the issue of intervention was also considered by the CCI in the case of *All India Online Vendors Association v. Flipkart & Anr.* 15 The CCI while declining to intervene observed that due to technology driven nature of e-commerce markets, any intervention in such markets must be carefully considered as it has the potential to stifle innovation.

However, in subsequent case laws, the CCI’s initial reluctance to intervene gave way to a pro-active approach perhaps on account of increasing concentration of market power in the hands of select few enterprises and a global shift towards stricter antitrust scrutiny and enforcement. For instance, in the case of *Umar Javeed & Anr. v. Google & Anr.* 16 the CCI ordered an investigation against Google’s practice of mandating the installation of its apps and services as a bouquet in order to obtain access to Google's proprietary applications and services, tying and bundling its products and preventing smartphone and tablet manufacturers from developing forked versions of Android. While passing its *prima facie* order, the CCI notably observed that via its conduct Google had reduced the ability and incentive of device manufacturers to develop alternate i.e., forked versions of Android, and thereby limited technical development to the detriment of consumers. Further, it noted that mobile search has

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15 Order dated 06.11.2018 in CCI Case No. 20 of 2018; 2018 SCC OnLine CCI 97.
emerged as a key gateway to access information with Android being a leading distribution channel for the same. Search engines display scale-based data-driven effects as improvements in search algorithms require large volumes of data input. Therefore, Google’s conduct was also directly aimed at continuing its dominance in the online search market.

A key takeaway from the *prima facie* order in *Umar Javeed* was the CCI’s recognition that a dominant digital enterprise can easily restrict the development of competitors by denying them an opportunity to fine-tune algorithms. Lack of such an opportunity leads to a lower quality of product which directly benefits the incumbents.

Subsequently, two separate investigations have been launched against Google in the year 2020 and 2021 for prominently incorporating Google Pay on its App store to the detriment of competing Unified Payment System [“UPI”] apps and for imposing restrictive conditions on prospective licensees of Smart TV operating system. Heavy stress was placed on potential network effects while passing both the said orders. In the case of Google Pay, the CCI observed that the presence of network effects in addition to reduced visibility would lead to reduction in usage, revenue and growth of competing apps and severely restrict their ability to innovate in accordance with the changing needs and preferences of customers. The importance of search and positioning of results in diverting traffic was also highlighted. In the case of Smart TV OS, the ‘profound network effects and their ability to attract more users, developers, investment and act as entry barriers was a key criterion used to establish the dominance of Google in the relevant market for ‘ licensable smart TV device operating systems’.

In 2020, the CCI also launched a probe against Amazon and Flipkart based on allegations of deep discounting, preferential listing, and exclusive launches. The ongoing investigation seeks to analyse whether the two e-commerce giants have acted in a manner to alter the landscape of online commerce to their benefit. A deeper analysis of the potential issues in the e-commerce sector was also undertaken by the CCI via its ‘Market Study on E-commerce in

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India’. Interestingly, the CCI in its study reiterated that network effects combined with even seemingly small actions have the capacity to neutralise rivals. Further, over time network effects may be difficult to dilute.

A similar stance was taken by the CCI when it highlighted the need for proactiveness while intervening in digital markets in the case of Federation of Hotel & Restaurant Associations of India & Anr. v. MakeMyTrip & Ors. In 2021, the CCI passed interim orders under Section 33 of the Act directing MakeMyTrip to relist FabHotels and Treebo on its platform. The CCI in its order observed that exclusionary conduct adopted by MakeMyTrip had the ability to irreversibly alter the competitive landscape.

In winner-takes-all platform markets, eliminating abusive conduct at the earliest is utmost importance before network effects take hold. Such effects are difficult to reverse at a later stage and may be futile as the competition may be eliminated long before remedial action is initiated.

The CCI’s proactiveness was also demonstrated when it took suo moto cognisance of WhatsApp’s updated privacy policy and ordered an investigation soon after the policy was announced in March 2021. In particular, the CCI observed that unreasonable data collection may grant a competitive advantage to the dominant player. In contrast to its previous decisional practice in the case of Vinod Kumar the CCI noted that due to the presence of network effects, the switching costs for WhatsApp are high. Until and unless all or most of a person’s contacts migrate to a different platform, WhatsApp’s over-the-top (OTT) services were considered non-substitutable. The lock-in effect of such non-substitutability was also considered responsible for raising switching costs. Imposition of data sharing agreement between WhatsApp and Facebook without any objective justification was held to be detrimental to the consumers and was considered as imposition of unfair terms and conditions.

IV. NETWORK EFFECTS AND THEIR ROLE IN FACILITATING CONSOLIDATION

For some observers, there is a certain sense of inevitability while considering the impact and market power of the five technological giants – Amazon, Alphabet (Google), Apple,
Facebook and Microsoft. Together, these five giants have a combined market value of over $5 trillion. The companies are collectively and individually ubiquitous in our day to day lives. Further, the accelerated shift towards virtualisation brought about by the COVID-19 pandemic, has further entrenched their position in our lives and economy.

As the digital economy is increasingly concentrated in select few hands, the role of dominant firms assumes even greater importance. As recognised by the CCI in the case of Matrimony v. Google, dominant firms act as gateways and wield control over essential points of access in the economy. Therefore, their conduct is highly scrutinised and their detractors are quick to allege monopolisation and unfair trade practices.

Recently, these dominant firms have been accused of exploiting their power in order to dictate terms and enter into agreements which would not have been possible in an open market. In fact, noted big-tech critic and current chair of the Federal Trade Commission, Lina Khan observes that many businesses now actively avoid conflict with platforms owing to their vast market power which has been utilised in a coercive manner in case of conflict.

Concerns regarding the dominance and growing movement against the same can been seen in the plethora of antitrust investigations currently ongoing or recently concluded against the tech giants in the USA, European Union and worldwide. The investigations initiated by

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26 ibid.
the CCI are significant given India’s importance in the sheer number of users and potential revenue.

Network effects have been attributed as the primary reason behind the continuing dominance and expansion of the tech giants in the digital market. However, while significant, network effects are not the sole factor responsible for such dominance. Strategic acquisitions of potential competitors and disruptive innovators is also attributed as factors responsible for further strengthening their marked power.30 With the help of these acquisitions, each giant now serves as a platform in itself offering a bouquet of services, aimed at retaining customers within its own ecosystem.31

The impact of such consolidation may result in a reduction in consumer choice, innovation and investment in new technologies. Further, the enormous financial resources required to challenge the incumbents have led to formation of so called ‘kill zones’ wherein dominant platforms are insulated from competition due to enormous financial resources required to challenge them.32 Accordingly, there are strong economic incentives to avoid competing with dominant platforms in their areas of operations.33

Another potential area of concern is related to the collection of data. Firms are increasingly collecting more and more personal data in their quest to personalise the experience of their users.34 Inadequate data protection laws may leave their users open to increasingly pervasive data collection practices. The CCI while passing its suo moto order against WhatsApp for its


proposed privacy policy, observed that deterioration of a platform’s service quality over time while retaining its userbase is an indicator of dominance – consumers are left with no choice but to either continue with poor privacy safeguards or leave the service entirely.\textsuperscript{35}

V. \textbf{POSSIBLE LEGISLATIVE MEASURES AND WAY FORWARD}

There is a growing chorus of voices which state that traditional forms of ex-post intervention in the market is increasingly becoming inadequate to deal with digital markets. Once the markets tips in the favour of one particular player, it may be nigh impossible to reverse the trend. To counter this, it is proposed that certain ex-ante regulations may be adopted in order to prevent accumulation of market power and curtail abusive practices.

A radical but noteworthy solution proposed by a report of the Sub-committee on Antitrust, Commercial and Administrative Law of the Committee of the Judiciary, U.S. House of representatives [“\textit{US Report}”]\textsuperscript{36} is to curtail the ability of dominant platforms from operating in adjacent lines of business. Further, it also recommends imposing non-discriminatory obligations on dominant firms prohibiting them from engaging in self-preferencing, and mandating them to offer equal terms for equal products and services. Additionally, the US Report recommends incorporating requirements of interoperability and data portability, requiring dominant platforms to make their services compatible with various external networks.

A parallel initiative is to broaden the scope of merger review by the CCI. It is argued that antitrust scrutiny disproportionately focuses on mergers of traditional businesses while ignoring the potential long-term harm caused by digital consolidation. The current approach misses out on preventing the acquisition of potential competitors which might in due course of time grow large enough to challenge the incumbents.\textsuperscript{37} Deeper analysis of low turnover targets which might escape antitrust scrutiny has also been suggested by the Competition

Law Review Committee, constituted by the Ministry of Corporate Affairs, Government of India, in its recommendations.\(^{38}\)

A digital code of conduct prescribing acceptable conduct has been mooted by the US Report as well as the Digital Markets Taskforce of Competition & Markets Authority, UK.\(^{39}\) Two detailed Acts to regulate the conduct of online platforms have also been proposed in the European Union.\(^{40}\) One of the stated rationales for the proposed legislative intervention in the European Union is to maintain fair and open online platform environment. The European Commission notes that a few large platforms control important ecosystems in the digital economy and have emerged as gatekeepers with power to act as private rule-makers. This power is at times exercised in a manner that imposes unfair conditions on businesses and results in less choice for consumers.

To counter the effects of such concentration, the Digital Markets Act firstly define gatekeepers on the basis of a set criteria taking into account the economic, intermediary and entrenched position of the platforms. Once such gatekeepers are identified, it imposes obligations such as prohibitions on gatekeepers from treating their own services in a more favourable manner. Significant fines based on up to 10% of worldwide annual turnover are also proposed in case of non-compliance.

A similar set of regulations are also under consideration in India. As per the draft Consumer Protection (E-Commerce) Rules, 2020,\(^{41}\) the government seeks to regulate the conduct of e-commerce enterprises. The proposed rules have been criticised for being ambiguous, making compliance difficult. Further, the Consumer Affairs Department which released the said rules has been criticised for overreach – venturing into the domains of other ministries. The said

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rules are now under review and an updated set of rules is expected to be released. Despite the setback, the movement towards regulation is picking up strength.

The possible impact of any such regulations needs to be carefully analysed. While on one hand, a code of conduct may be beneficial in setting the standards of acceptable behaviour and easily identifying abuse, it may also restrict the free flow of market forces – artificially freezing the market to its current iteration. It must be kept in mind that the developments in digital market while unpredictable have often been beneficial for the consumers. Successive innovations have directly improved consumer welfare. In light of this, possible legislative and policy measures must be circumspect and allow the markets enough freedom to determine their own course.