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1. Introduction

Digital economy has a very broad impact and affects human activities to a very large extent. It has been very effective in influencing our social and economic activities. The term ‘Digital Economy’ was coined by Don Tapscott in his best-seller “The Digital Economy: Promise and Peril in the Age of Networked Intelligence” (1995)¹. The digital economy is an umbrella term used to describe markets that focus on digital technologies. It typically involves the trade of data, services or goods through electronic commerce as a medium.² With the expansion of this sector there has been substantial economic growth in the last couple of years and technological shift has had effects on the markets that go far beyond the digitalisation context alone. Furthermore, the accessibility of internet has increased over the years owing to mobile devices. Consequently, the increasing audience to the digital economy has resulted in the outburst growth of this sector.

The digitalisation of various sectors in the traditional economy has had a dramatic effect on how regular and traditional businesses work, and consequently, the related markets. There are many differences between the traditional and digital markets. *Firstly*, a major part of the digital economy is based on users’ personal data, and flow of this data from one platform to another. The standard units of transactions in a market, price and money paid, consequently, are rarely seen.³ For example, a firm’s turnover is a significant indicator of its market size, however, a digital platform may deal with multiple sides in an economy, where one side is subsidised by the other, implying a zero-priced market.

Secondly, the elements that influence the market vary to a great extent. Unlike the traditional market, sole pricing structures are not the determinant of demand in the market. The interplay of

¹KoshaGada, *The Digital Economy In 5 Minutes*, Forbes (Jun. 16, 2016), <https://www.forbes.com/sites/koshagada/2016/06/16/what-is-the-digital-economy/#1d2103f17628>(Last visited 28 March 2018).

²Organisation of Economic Co-operation and Development (OECD), *The Digital Economy* (Feb. 7, 2013), <http://www.oecd.org/daf/competition/The-Digital-Economy-2012.pdf> (Last visited 28 March 2018) [hereinafter “OECD”].

³ Cassandra Liem&Georgios Petropoulos, *The economic value of personal data for online platforms, firms and consumers*, Bruegel (Jan. 14, 2016), <http://bruegel.org/2016/01/the-economic-value-of-personal-data-for-online-platforms-firms-and-consumers/> (Last visited 28 March 2018)[hereinafter “Liem”].

various network effects,⁴ consequently, determine and promote the market concentration. A digital economy is much more dynamic than traditional economy. Owing to availability of innumerable routes to reach an end-user and deliver digital services, the market power of any firm can easily be challenged, and a smallest and freshest of entrant in the market can become a challenge to incumbent's business.

This paper opens with an analysis of the major stake-holder sectors of the digital economy⁽²⁾ relying on which, an identification of issues and challenges posed to the competition law authorities is made with reference to formerly recognised sectors and digital economy as a whole.⁽³⁾ Based on the assessments previously done, in the light of assertions made by competition law authorities worldwide and eminent legal scholars, the authors have made an effort to provide recommendations and inputs to the aforementioned challenges in the latter part of this paper.⁽⁴⁾

2. Searching the web, socializing or making a purchase- It's all digital

Digitalisation can be seen in all economic avenues today. However, this advent came with popularisation of certain sectors in this economy. Internet search, social networking and E-Commerce are some of those sectors. This section deals with the authors' insight into the three major stakeholder sectors in this economy, the mechanism on which these sectors function and their approach to earn profits. Through analysis of these sectors, authors make an attempt to devise the challenges they pose, or are likely to pose to the competition authorities during analysis of these sectors.

SEARCH ENGINES

The growth in the search engine market has not been very old in the digital economy. Back in the 1990s search engines were hardly used on a large scale, while today search engines like Google and Bing are among the multi-billion dollar business models.⁵ According to the net market share (as of April 2017) the global search engine market share statistics favor Google with a dominant share of 77% followed by Baidu, Bing and Yahoo at 8.13%, 7.31% and 5.6% respectively which indicates the dominant position of Google in the search engine market.⁶ The

⁴ CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* (Harvard Business School Press, 1998).

⁵ Justus Haucap & Ulrich Heimeshoff, *Google, Facebook, Amazon, eBay: Is the Internet driving competition or market monopolization*, 11 INT. ECON. ECON. POLICY 49 (2014) [hereinafter "Haucap & Heimeshoff"].

⁶ Robert Allen, *Search Engine Statistics 2017*, Smart Insights (Apr. 13, 2017), <http://www.smartinsights.com/search-engine-marketing/search-engine-statistics> (Last visited 28 March 2018).

search engine market also earns a major share of their revenue from the advertising they offer.⁷ Most widely used search engines are a lucrative choice for the advertisers as they get more views along with accumulated data by the search engines. Users generally are aware of the use of their search-query logs by the search engine companies and agree to it as it is a part of transaction for which they are provided a service for free. However, use of this information by third parties is more problematic and may be objectionable on the part of unsuspecting users.⁸ Further Google argues that the retention of these query logs is critical to its ability to operate and improve its services. It faces a daunting task to guess what a user intends, based on two or three words they enter as a search query.⁹ This entire algorithm provides user with a personalized experience, which makes Google the most widely used search engine.

Yet Google also analyses search-query logs for revenue-generating purposes, particularly for targeting and maximizing the effectiveness of advertisements, Google, after all, is an advertising company.¹⁰ Behavioral advertising forms a predominant model for search engines in which users are displayed advertisements based on their usage of the search engine. By installing cookies in users' browsers, search engines like Google record the type of pages users visit and associate them with certain interests.¹¹ These advertisements earn revenue on a pay-per-click basis. Google CEO Eric Schmidt stated: "If we target the right ad to the right person at the right time and they click it, we win".¹² Such targeting can only be achieved by analyzing a user's search history.

SOCIAL NETWORKS

Another very significant sector in the digital economy is Social Networking. It is immensely popular among billions of people around the world, simply for a reason that the virtual network has made it feasible to stay in touch with friends and acquaintances. Social networking portals like Facebook or Google Plus have made the world a smaller place as they have provided users a virtual platform that brings them closer. With their limited exposure of social media, in the year 2007, *Danah M. Boyd* and *Nicole B. Ellison* defined social media as:

⁷ Shiv Mehta, *How Google's Search Engine Makes Money*, Investopedia (Aug. 13, 2015), <http://www.investopedia.com/articles/investing/081315/how-googles-search-engine-makes-money.asp> (Last visited 28 March 2018).

⁸ Omer Tene, *What Google Knows: Privacy and Internet Search Engines*, 4 UTAH. L. REV. 1434 (2008) [hereinafter "Tene"].

⁹ *Id.*

¹⁰ Saul Hansell, *Google Wants to Dominate Madison Avenue, Too*, The New York Times (Oct. 30, 2005), <http://www.nytimes.com/2005/10/30/business/yourmoney/30google.html> (Last visited 28 March 2018).

¹¹ Liem, *supra* note 3.

¹² Tene, *supra* note 8.

*“Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.”*¹³

Interestingly, with technology becoming handy and innovation, the ambit of social networks now undertake from “people you may know” to “what’s on your mind”, contrary to the classic Boyd and Nicole definition. Social networking portals also come with varied purposes. Where Facebook is for social contacts and LinkedIn for the business contacts, there is also Tinder that indulges in the digital economy as one of the leading online dating portals. Surprisingly, these three different networks target similar audience but serve different purposes. Social networking portals with their immense growth have been under the competition law radar for quite a few years now. Since the monetary network switching costs are zero and the procedures allow multi homing with convenience as it takes only a couple of minutes to set up a user profile, the only way out for a rival to conquer the market is product innovation. Until a few years ago MySpace was the leader of the industry which was outrun by Facebook. We may see the emergence of a new social-networking company that would manage to find a powerful concept or technology to revert the tendency of Facebook’s increasing position.¹⁴

The lock-in effects that bind an existing user to a platform might prove to be an obstacle while switching platforms. Due to heterogeneous preferences not every user might be willing to use the same platform. From worldwide perspective, Facebook is by far the market leader¹⁵. There are 1.2 billion users on Facebook, but the product cost being zero doesn’t explain where the revenue comes from. The social media industry works on a simple principle, “if you are not paying for the product, the product is you”.¹⁶ The real transaction isn’t between the user and the interface that the product has created, but with the advertisers that indulge in behavioural advertising based on the user’s search pattern and online activities.¹⁷

¹³Danah M. Boyd & Nicole B. Ellison, *Social Network Sites: Definition, History and Scholarship*, 13 JCMC 1 210 (2007) (Last visited 24 March 2018).

¹⁴Florence Thépot, *Market Power in Online Search and Social Networking: a Matter of Two-Sided Markets* (UCL Centre for Law, Economics and Society, Working Paper No. 4/2012), <https://www.ucl.ac.uk/cles/research-paper-series/research-papers/cles-4-2012> (Last visited 22 March 2018) [hereinafter “Thépot”].

¹⁵Haucap&Heimeshoff, *supra* note 5.

¹⁶Scott Goodson, *If You’re Not Paying for it, You Become the Product*, Forbes (Mar. 5, 2012), <https://www.forbes.com/sites/marketshare/2012/03/05/if-youre-not-paying-for-it-you-become-the-product/#43de71e45d6e> (Last visited 20 March 2018)

¹⁷Greg McFarlane, *How Facebook, Twitter, Social Media make money from you*, Investopedia, <http://www.investopedia.com/stock-analysis/032114/how-facebook-twitter-social-media-make-money-you-twtr-lnkd-fb-goog.aspx> (Last visited 28 March 2018).

E-RETAIL AND E-COMMERCE

The presence of Digital/Digitalised markets, do not only affect a narrow section of the economy, but new technologies, also work to change how all other markets work in important ways. E-Commerce, more popularly known as E-retail, has gone through a significant revolution after the popularisation of the Digital markets. Led by faster reliable telecom network speeds, convenience, as well as better adoption of internet services, online retail in India is expected to be at par with the Indian physical stores in the next half a decade.¹⁸ As per a European survey, around 53% of the total retail sales in Europe will be web impacted, majorly influenced by *cross-channel* retail sales.¹⁹ Online markets and E-Commerce in India and abroad can be seen in four categories.²⁰ The first category includes goods which are provided to an end-user in the digital form. Netflix, Amazon *Prime Video*, YouTube Red are some platforms which provide these services. Second category includes firms like Amazon, Flipkart, and EBay, which merely facilitate the search and purchasing of the goods. Hotel search and booking websites like MakemyTrip and Expedia are also included in the second category. Another species of E-commerce is that of digital markets at the wholesale level. This is the kind where transactions take place on a Business-to-Business level. Aiming to facilitate trade between businesses, some of these markets don't even function by employing internet, instead, other internal electronic systems may be used. Reliance *e-biz* is one such platform in India. The fourth category can be called a substitute of e-retail, that is, Auction platforms. EBay since decades has been the market leader in the area of online auctions.

The online retail enterprises in India aren't subject to much scrutiny, as there is regular entry of new competitors in this area of trade. Flipkart led the market by becoming the first \$1 bn. firm in this sector, but was followed by the entry of firms like Amazon and prospects of Alibaba of China entering the market.²¹ The prospects of anti-competitive practices in this sector are unlikely till date. Although, firms like Amazon may be at an advantage with their internationally accumulated assets. However, any misuse of its market position is yet to come under the scanner.

¹⁸ *Retail Industry in India*, India Brand Equity Foundation (Sep. 2017), <https://www.ibef.org/industry/retail-india.aspx> (Last visited 28 March 2018).

¹⁹ *Web to influence more than half-or-€947 billion-of European Retail sales by 2020*, Forrester (Jul. 28. 2015), <https://www.forrester.com/Web+To+Influence+More+Than+Half+Or+947+Billion+Of+European+Retail+Sales+By2020/-/E-PRE8284> (Last visited 28 March 2018).

²⁰ NIKOLAOS VETTAS, *COMPETITION AND REGULATION IN MARKETS FOR GOODS AND SERVICES: A SURVEY WITH EMPHASIS ON DIGITAL MARKETS* (Athens University of Economics and Business and CEPR, 2015).

²¹ Sohini Mitter, *How Alibaba is slowly yet surely expanding its footprint in India*, BGR (Jun. 12, 2017), <http://www.bgr.in/news/how-alibaba-is-slowly-yet-surely-expanding-its-footprint-in-india/> (Last visited 28 March 2018).

Competition Law is meant to benefit the ultimate consumer by promoting innovation.²² As long as there is innovation in the market, ability of the consumers to multi-home and freedom of entry of new firms, any anti-competitive practices are unlikely.²³

The situation is different when it comes to e-auction platforms, where EBay has been seen as the market leader worldwide since years. This is due to less multi-homing abilities of consumers on one side of the platform owing to the individual reputation which takes time to build, switching costs and indirect network effects. Therefore, the lock-in effect on EBay is significant.²⁴ This situation may apply to certain other firms in the online marketplace and consideration of the same is of major importance when an analysis is done by the competition authorities.

3. Challenges to Competition & Antitrust Laws

A close look at the above mentioned stake-holder sectors reveals a lot about how their markets function and about their approach towards making profits. Authors in this section, have provided their insight towards the speed-bumps that authorities may go through during digital market analysis, as compared to traditional market analysis.

DEFINITION OF MARKET

The Competition Authorities face a variety of challenges when defining a market in the digitalised economy. The digital market comprises of two kinds of platforms/vendors. One, where a vendor operates among one class of consumers. WhatsApp, for example, is one sided market vendor.²⁵ Two sided markets, on the other hand serve two types of consumers at the same time.²⁶ For instance, a market for newspaper advertising serves both, the advertisers, as well as the newspaper readers simultaneously. A third kind emerged with advent of the digitalised economy, called the Multi-sided platforms (MSPs).²⁷ A multi-sided platform gets varied customer groups together on a common platform and gets them to interact. Operating systems like Microsoft Windows, Mac OS and Linux, e-commerce platforms like eBay and Amazon, social networking platforms like Facebook and advertising platforms like Google and Yahoo, among others, are some examples of multi-sided platforms. Interaction of these Multi-sided platforms

²² The Competition Act, Preamble (2002).

²³ Haucap & Heimeshoff, *supra* note 5.

²⁴ *Id.*

²⁵ *INFORMATION SYSTEMS: A MANAGER'S GUIDE TO HARNESSING TECHNOLOGY*, (Open Textbooks- University of Minnesota Libraries), <http://open.lib.umn.edu/informationssystemsystems/chapter/6-3-one-sided-or-two-sided-markets-2/> (Last visited March 26, 201).

²⁶ *Id.*

²⁷ David S. Evans, *Competition and Regulatory Policy for Multi-Sided Platforms with Applications to the Web Economy*, 2 *CONCURRENCES* 57-62 (2008), <http://ssrn.com/abstract=1090368> (Last visited 28 March 2018) [hereinafter "Evans"].

among themselves as well as with the consumers raise a number of issues for competition regulations and analyses. Being associated with a comparatively concentrated market where a single platform serves a major consumer base, these platforms are often scrutinised by the competition regulators. The techniques and tests currently used by competition authorities are devised keeping in mind the traditional economy. Owing to the complicated strategies used in digitalised economy, which lack scope in explaining competitive significance and inapplicability of previously devised tools and techniques, such platforms pose significant challenges to market analysis starting from market definition itself.

Every act contrary to the spirit of competition and consumer benefit in the market shall be subjected to scrutiny by the relevant competition authorities.²⁸ This criticism is effected through certain steps, first of them being the Market definition.²⁹ The relevant market has been defined as the market determined by the competition authorities with regard to the relevant product market and relevant geographic market where relevant product markets include all interchangeable products in the market.³⁰ Identification of products which exert competitive pressure on the product that a particular firm or firms deal with is the main purpose of identifying relevant market.³¹ This goes for all the cases, be the firms which are likely to merge, firms subjects of regulatory intervention and firms which are suspects of anti-competitive activities.³²

With advent of the multi-sided platforms like Google and Facebook, determination of whether one, two or multiple relevant markets should be defined poses the first challenge to the competition policy. Each side of the MSP's business influences and constrains their strategies on the other side.³³ The competition authorities often fail to distinguish between transactional and non-transactional markets.³⁴ Further, when defining the relevant market in case of multi-sided digital platforms, there is a risk where the authorities may analyze two sides of a platform, but fail to recognize the subsequent relationships of those sides with other platform markets. This can

²⁸ Philip Lowe, *The design of competition policy institutions for the 21st century — the experience of the European Commission and DG Competition*, Competition Policy Newsletter, European Commission (No.3, 2008), http://ec.europa.eu/competition/publications/cpn/2008_3_1.pdf (Last visited 28 March 2018).

³⁰ The Competition Act, §2(r), §2(t) (2002).

³¹ RICHARD WHISH & DAVID BAILEY, *COMPETITION LAW* (7th ed. OUP 2012).

³² Competition Commission of India v. Co-ordination Committee of Artistes and Technicians of West Bengal Film and Television and Ors., (2017) 5 S.C.C. 17.

³³ David S. Evans & Michael D. Noel, *The Analysis of Mergers That Involve Multisided Platform Businesses*, 4 J. COMP. L. & ECON. 663, 696 (2008) [hereinafter "Evans & Noel"].

³⁴ Lapo Filistrucchi et al., *Market Definition in Two-Sided Markets: Theory and Practice*, (Tilburg Law School Legal Studies Research Paper Series, Paper no. 09/2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2240850 (Last visited 28 March 2018) [hereinafter "Filistrucchi"].

be observed in the case relating to acquisition of WhatsApp by Facebook.³⁵ The CCI, in this merger analysis failed to recognise certain narrower markets when dealing with WhatsApp. It is well known, that WhatsApp is a platform for voice calling through internet, video-calling through internet and instant messaging. Contrarily, in this case, markets pertaining to video calling, voice calling through internet, as well as online messaging were all dealt with under the same relevant market of “*the market for instant messaging services using consumer communication apps through smart phones*”. Although, it must have been considered that applications like Skype, which deal solely in the market of video calling might be adversely affected when their market is not considered in the analysis separately. Further, although this definition was similar to the narrow definition adopted by the European Commission in its decision approving the acquisition in question,³⁶ it must be noted that EC’s ultimate analysis was undertaken in three narrower markets namely market for consumer communication services, social networking services, as well as online advertising services keeping in mind the narrow markets, which may be effected in light of this merger. These three different markets, nonetheless, were not identified by the Competition Commission of India.³⁷ However, an omission of taking other narrow markets into consideration may have an effect in the longer run owing to markets which may be affected due to the anti-competitive activities, but *not being subject to market analysis upon failure of definition*.

A similar position can also be observed in the European Commission decision pertaining to the Google-DoubleClick merger.³⁸ Google acquired the advertising platform DoubleClick. Following which the European Commission analyzed the concern that the combination of Google’s and DoubleClick’s assets could put the merged parties into a position of strength, unmatched by their competitors. The European Commission, as well as the United States’ FTC found that none of the alleged scenarios were likely to be implemented, let alone distort competition. This decision has been critiqued as it failed to take into consideration markets apart from those pertaining to online intermediation and missed out on considering other two sided platforms like

³⁵Shri Vinod Kumar Gupta v. WhatsApp Inc., Case No. 99 of 2016 (March, 1 2017) (CCI), <http://www.cci.gov.in/sites/default/files/26%282%29%20Order%20in%20Case%20No.%2099%20of%202016.pdf>. [hereinafter “WhatsApp CCI case”]

³⁶ Facebook/ WhatsApp, Case No. Comp/M.7217 (Oct. 3, 2014) (European Commission), http://ec.europa.eu/competition/mergers/cases/decisions/m7217_20141003_20310_3962132_EN.pdf [hereinafter “Facebook/WhatsApp EU case”].

³⁷Modhulika Bose, *Who Will Bell The Apps?*, MONDAQ (JUL. 13, 2017), <http://www.mondaq.com/india/x/610112/Antitrust+Competition/Who+Will+Bell+The+Apps> (Last visited 28 March 2018).

³⁸ Google/DoubleClick, Case No. Comp/M.4731 (Mar. 11, 2008) (European Commission), http://ec.europa.eu/competition/mergers/cases/decisions/m4731_20080311_20682_en.pdf [hereinafter “Google/DoubleClick case”].

movie streaming and navigation services that may be drastically effected post the merger in question.³⁹

Another challenge posed to the competition authorities is owing to the dynamic nature of market. The companies in a digital economy keep creating new markets, resulting in giving an ever-changing nature to the digital markets. For instance, PayTM, has evolved and entered markets like E-retail from solely being a money transfer application in a span of 2-3 years. Such a nature of the digitalised economy, hinders competition authorities from incorporating a market in defined boundaries.

The competition authorities face yet another issue with regard to market definition, one pertaining to the policy tests used for evaluating the same.⁴⁰ The most meticulous test used for market definition is the Small but Significant and Non-transitory Increase in Price (SSNIP) test.⁴¹ The SSNIP test is the standard approach to defining relevant market, in both, Indian and European Competition Law regimes.⁴² It defines the market, which includes collectively the narrowest product and geographical market, for which a firm could exercise dominance and raise prices.⁴³ Numerous scholars in the past have warned against use of the SSNIP test in two-sided or multi-sided markets like those which persist in the digitalised economy.⁴⁴ The traditional SSNIP test deals with increases and decreases in single prices, in one-sided markets.⁴⁵ This test, consequently fails to take into consideration the interdependencies and network effects that are a result of an interaction between two sides of a two-sided or a multi-sided platform.⁴⁶

It has been recommended that it is enough to define a single market as long as all transactions at the different sides of the platform take place simultaneously.⁴⁷ A modified version of the single SSNIP test is suggested, which relies on measuring the overall profitability, by including the simultaneous fixed and variable costs incurred, and the losses incurred by all sides of the platform.⁴⁸ The question still remains whether it is more viable for the Competition Authorities to

³⁹Thépot, *supra* note 14.

⁴⁰ OECD, *supra* note 2.

⁴¹Filistrucchi, *supra* note 34.

⁴² Mr. RamakantKini v. Dr. L.H. Hiranandani Hospital, Case No. 39 of 2012 (Feb. 5, 2014) (CCI), http://www.cci.gov.in/sites/default/files/392012GG_0.pdf.

⁴³Filistrucchi, *supra* note 34.

⁴⁴ Evans & Noel, *supra* note 33..

⁴⁵ *Study of the Policy Department A: Economic and Scientific Policy on Challenges for Competition Policy in a Digitalised Economy* (Jul. 2015), http://www.europarl.europa.eu/RegData/etudes/STUD/2015/542235/IPOL_STU%282015%29542235_E_N.pdf (Last visited 28 March 2018) [hereinafter “EU – Challenges of a Digital Economy”].

⁴⁶ *Id.*

⁴⁷ OECD, *supra* note 2

⁴⁸Filistrucchi, *supra* note 34.

attempt to measure the net effects of profits/losses of the multiple sides of platforms in such a situation, or treat the two sides separately to define relevant markets?

ASSESSMENT OF DOMINANCE AND ABUSE

By now we have established how digital economy and ‘brick and mortar’ economy or traditional economy function on very diverge lines of action. However applying the same competition regime on both might prove to be a tedious task. The market trends, types of investments, growth, innovation and market tactics applied in both the economies are tremendously dissimilar. It requires a different interpretation of the same law in situations where facts *prima facie* appear to be similar. Competition law in India functions to keep the market competition alive, create space for entries of new market players and keep the innovation going.

The European Court of Justice has defined a dominant market position as:

“A position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers.”⁴⁹

Market power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers is a prerequisite for determining a dominant position. While analysing the dominant position the authorities often make use of quantitative indicators such as market shares, price levels, concentration ratios or profit margins without realising some of these indicators can be defined only when the market remains static.⁵⁰ However the digital market, as a result of constant innovations has evolved itself to be a dynamic one⁵¹. The rate of technological change is high. An example of how fast a market position can be challenged is the social media service Myspace⁵². Once it is identified that a digital company holds a dominant position in market another challenge that the authorities come across is to determine if its conduct can be considered anti-competitive. In the dynamic context of digital markets, it is challenging to distinguish anticompetitive behaviour from normal business strategies.⁵³ The law doesn’t criticise

⁴⁹ Case C-27/76, United Brands Company and United Brands Continental BV v Commission of the European Communities-, 1978 ECR 207 [hereinafter “United Brands case”]; Case C-85/76, Hoffmann-La Roche & Co. AG v Commission of the European Communities, 1979 ECR 461.

⁵⁰ OECD, *supra* note 2.

⁵¹ EU – Challenges of a Digital Economy, *supra* note 45.

⁵² “Myspace founded in 2003 grew and became a very popular social media service. However, in 2008 Facebook overtook Myspace by large numbers and the number of Myspace users has declined ever since”, <http://en.wikipedia.org/wiki/Myspace> ; Bloomberg Businessweek http://www.bloomberg.com/bw/magazine/content/11_27/b4235053917570.htm.

⁵³ EU – Challenges of a Digital Economy, *supra* note 45.

being in a dominant position but prohibits ‘abuse of dominance’⁵⁴. Digital monopolies, barriers to entry in market for new market players, pre-emptive mergers are a few ways in which dominance is abused.

ANALYSIS OF MERGERS

Any merger, or combination, as mentioned in the Competition Act, 2002, which causes or is likely to cause Appreciable Adverse Effects on Competition is void under the Indian Competition Act.⁵⁵ Further, parties to any merger, meeting the threshold set by the Competition Commission have to mandatorily notify the commission regarding the same.⁵⁶

Mergers and Combinations are a quotidian activity of technology related companies as well. Facebook taking over WhatsApp⁵⁷, Google’s takeover of DoubleClick⁵⁸ and Microsoft’s acquisition of Skype⁵⁹, among numerous others, are examples of some widely known mergers in the technological sector. The emergence of such technological firms in the digitalised economy pose another challenge to the competition authorities like Competition Commission of India. One of those related challenges being a concealed intention to enforce a pre-emptive merger.

Pre-emptive mergers are aimed by established companies to acquire potential competitors, so as to prevent disruption of one’s own business model.⁶⁰ Mergers of this nature are contrary to the principles of a competitive market, as they are likely to reduce innovation and potential competition, leaving less options for a consumer to choose from. The challenge exists in the identification of such mergers, as it is difficult to distinguish competitive business strategies from anti-competitive motives in such markets.⁶¹ There might be instances of pre-emptive mergers in acquisition of smaller units, but extreme cautiousness should be taken so not to consider every acquisition as anti-competitive. A failure to do so can adversely affect innovations, as it is prospects of a takeover which motivate smaller firms to innovate. The analysis of mergers

⁵⁴ Consolidated version of the Treaty on the Functioning of the European Union, Art. 102, 2008 O.J. (C115) 89; The Competition Act, §4 (2002).

⁵⁵ The Competition Act, §6 (2002).

⁵⁶ The Competition Act, §6(2) (2002); *see also* The Competition Commission of India (Procedure in regard to the transaction of business relating to combinations) Regulations (2011), http://www.cci.gov.in/sites/default/files/regulation_pdf/Combination%20Regulations%202016%20-%20FINAL.pdf.

⁵⁷ WhatsApp CCI case, *supra* note 35; Facebook/WhatsApp EU case, *supra* note 36.

⁵⁸ Google/DoubleClick case, *supra* note 38.

⁵⁹ Matt Rosoff, *Microsoft Insider: Here’s Why We Bought Skype*, BUSINESS INSIDER (May 12, 2011) <http://www.businessinsider.com/why-microsoft-bought-skype-an-insider-explains-2011-5?IR=T> (Last visited 28 March 2018).

⁶⁰ József Molnár, *Pre-emptive Horizontal Mergers: Theory and Evidence* (Institute of Economics, Hungarian Academy of Sciences, Discussion Papers, Paper no. MT–DP. 2002/13), <http://econ.core.hu/doc/dp/dp/mtdp0213.pdf> (Last visited 28 March 2018).

⁶¹ EU – Challenges of a Digital Economy, *supra* note 45.

involves a series of steps, starting from market definition, which is a challenge in itself, as discussed above, followed by an analysis of market power of the firms and of whether the behavior in question is anti-competitive.⁶² The problem arises in the definition and determination of market boundaries itself, as has been discussed earlier in this paper which is a result of the dynamic nature of this market and the constantly changing market boundaries. Further, due to dynamic markets and similarly dynamic feedback of users towards the platforms in the market, the standard tools of evaluating market shares or profit margins turn out to be less useful as market power determinants.⁶³ Owing to the fact that first-mover advantages can make a significant difference in a market position like that of firms in digital markets, it turns out to be of equal importance to prevent others from entering the market in future. Firms anticipate future entry into a market through innovation, which becomes a lucrative option for existing larger firms to takeover or merge with. This activity is extremely beneficial to the end-users, as such mergers are likely to increase innovation in the market. However, when such acquisitions are for the sole purpose of eliminating the potential competitors or alternative routes to consumers, they are threatening to market prosperity. The competition authorities frown upon such mergers and the CCI subjects prospectively anticompetitive mergers, to scrutiny, but that is limited to mergers of bigger firms with mavericks. There is a need for reconciliation of mavericks in context of digital and dynamic markets, as mavericks, or market stealers, in these markets aren't the competitive bigger firms, but innovative new firms which are likely to attract the end-users.⁶⁴

Competition authorities across the world have till date, failed to reconcile with the requirements of a dynamic market. This inability is evident from numerous competition authorities' decisions in the past like the Google-DoubleClick acquisition⁶⁵. DoubleClick used a state of the art DART (Dynamic Advertising Reporting & Targeting) ASP/SaaS ad-serving technology which allowed clear targeting and reporting of ad-serving per media property for websites within its network and technology sectors.⁶⁶ Acquisition of DoubleClick by Google allowed to gather information and technology to serve the most personalised advertisements. This acquisition was approved by both the European Commission and the FTC, with one dissent based on network effects of the

⁶² MAHER M. DABBAH, *EC AND UK COMPETITION LAW: COMMENTARY, CASES AND MATERIALS* (1st ed., Cambridge University Press 2004).

⁶³ See The Competition Commission of India (Procedure in regard to the transaction of business relating to combinations) Regulations, Schedule 1 (2011), http://www.cci.gov.in/sites/default/files/regulation_pdf/Combination%20Regulations%202016%20-%20FINAL.pdf.

⁶⁴ EU – Challenges of a Digital Economy, *supra* note 45.

⁶⁵ Google/DoubleClick case, *supra* note 38.

⁶⁶ *DoubleClick: Early Developments*, WIKIPEDIA (Sep. 15, 2017), https://en.wikipedia.org/wiki/DoubleClick#Early_developments (Last visited 28 March 2018).

firms not being taken into consideration.⁶⁷ Consequently, this acquisition has produced certain barriers to entry owing to the fact that no competitor can manage to offer a service of the same quality, because of the tremendous amount of user-data, that Google owns.⁶⁸ Acquisition of WhatsApp by Facebook⁶⁹ is also illustrative of such shortcomings. WhatsApp was a paid online messaging service, which was acquired by Facebook recently. It is evident that Facebook was interested in obtaining information generated by WhatsApp so as to be able to target ads more efficiently. A changed business model of WhatsApp can be observed today. Firstly, it doesn't charge for its services anymore, experimenting with the same. Secondly, WhatsApp's privacy policy has been amended to share data specifically with Facebook.⁷⁰ This merger has drastically affected the market. End-users had two routes, one of a paid service with privacy of data (WhatsApp messenger), another, with less privacy protection, but free services (Facebook messenger).⁷¹ Today, consumers are at a loss of alternate routes and multi-homing is equally difficult in this sector⁷², owing to the mass usage of WhatsApp messenger. Consequently, the users who valued their privacy over charges for a service, have seen a decrease in their welfare.

It can therefore be concluded, that the present thresholds and tests provided for subjecting a merger to scrutiny are comparatively static, and fail to take into regard the changing position like that of the economy in question. Therefore, a newer approach, along with the already provided tests, to conduct merger analyses is required. There is a need to explore whether mergers in the digitalised economy should be looked with the valuable data involved, irrespective of the turnovers and numerical statistics of a firm's performance.⁷³

IDENTIFICATION OF PREDATION

Predatory pricing like other anti-competitive practices is a result of abusing the dominant position⁷⁴. Pricing one's product below the incurred costs with an aim of eliminating other

⁶⁷ Google/DoubleClick case *supra* note 38; "Commissioner Pamela Jones Harbour;s dissent in Google/DoubleClick", https://www.ftc.gov/sites/default/files/documents/public_statements/statement-matter-google/doubleclick/071220harbour_0.pdf

⁶⁸ *The Data-Driven Economy. Challenges for Competition* (Autoritat Catalana de la Competència), http://acco.gencat.cat/web/.content/80_acco/documents/arxiu/actuacions/Eco-Dades-i-Competencia-ACCO-angles.pdf (Last visited 28 March, 2018) [hereinafter "The Data-Driven Economy"].

⁶⁹ WhatsApp CCI case, *supra* note 35; Facebook/WhatsApp EU case, *supra* note 36.

⁷⁰ Natasha Lomas, *WhatsApp's privacy U-turn on sharing data with Facebook draws more heat in Europe*, TECHCRUNCH (Sep. 30, 2016), <https://techcrunch.com/2016/09/30/whatsapps-privacy-u-turn-on-sharing-data-with-facebook-draws-more-heat-in-europe/> (Last visited 28 March 2018).

⁷¹ The Data-Driven Economy, *supra* note 68.

⁷² Haucap & Heimeshoff, *supra* note 5.

⁷³ Duncan Robinson, *European Commission may consider customer data concerns in mergers*, FINANCIAL TIMES (Sep. 29, 2016), <https://www.ft.com/content/415351b8-3ec6-3d1e-9677-ff0e54cc9101?mhq5j=e5> (Last visited 28 March 2018).

⁷⁴ The Competition Act, §4(2) (a) (2) (2002).

market players who aren't dominant in the market and recouping initial losses in future by increasing prices is the overall idea of predatory pricing.⁷⁵ Both predatory pricing and abuse of dominance share a genus-species relationship.

Due to the dynamic nature of the digital markets, establishing dominance of a single company in the market can be a difficult task. It would be no surprise to see multiple digital companies emerging as dominant market players. Moreover one should admit that the market power of a company during the predation phase doesn't tell us much about the market power during the post-predation phase and this is what the predatory pricing law should seek to prevent. The law must take into account the firms which are not yet 'dominant' but have a fair share of their financial resources engaged in predation and ultimately obtain control of the market. If the laws require satisfaction of the dominant position parameter at the time of predatory pricing it would be unable to restrict firms which attain the dominant position as a result of predatory pricing. It may be true that the competition policy is designed to protect competition and not to protect competitors, but that contrast rather loses meaning where the only competition is the only competitor.⁷⁶

Another challenge confronted by the competition authorities is the predation in two-sided or multi-sided platforms of digital companies. Multi-sided platforms have the privilege to operate at zero costs at one side and recoup losses by highly pricing the users on the other side. For instance, Google being a multi sided platform provides various services at no costs but can recoup those losses by charging the advertisers for advertising their content, thereby compensating the initial losses and attaining a dominant position in the digital market. However while determining predatory pricing in two-sided or multi-sided markets treating separate sides of a digital platform as separate markets shall make it possible to catch price abuse.⁷⁷

The line of distinction between predatory and legitimate price in a competition is hard to establish because of various key factors that determine the market price. Therefore the test of predatory pricing must be based on a substantially high standard of proof simply to prevent the possibility of penalizing companies engaged in legitimate price competition. The *equally-efficient-competitor benchmark test* is a commonly used benchmark test while determining anti-competitive pricing.⁷⁸ The test examines whether a competition can be maintained between a competitor and

⁷⁵ The Competition Act, Explanation (b), §4(2) (2002).

⁷⁶ Cyril Ritter, *Does the Law of Predatory Pricing and Cross-Subsidisation Need a Radical Rethink?*, 27 W. Comp. L. Rev. 613-649 (2004) [hereinafter "Ritter"].

⁷⁷ Evans, *supra* note 27.

⁷⁸ Ritter, *supra* note 76.

the dominant firm when it applies the same end-user price.⁷⁹ However, multi sided platforms charge multiple prices, one to each different sides of the platform leaving the authorities with an ambiguity as to which prices should be compared and when are they anti-competitive. Two-sided digital markets are often witness to zero-pricing strategies.⁸⁰ Under some legal procedures test of recoupment of losses by the praying platforms is also examined.⁸¹ One major shortcoming with this test remains, the two-sided platforms that can recoup losses from either side of the platform and be in the competition. With that, one cannot disagree that forecasting future developments on the basis of certain thresholds such as market entry, capacity, reputation and policies of a company offer very little reliability and accuracy.

MONITOR EXCLUSIVITY AGREEMENTS?

The plight of an innovative competitor, failing to enter the market due to anti-competitive practices that the dominant players conduct is unimaginable. One of the most debatable practices in the digital market is the restrictive trade agreements, which may involve exclusivity agreements. Google in relation to manipulating search results and imposing exclusivity obligations on advertising partners at the expense of competing services may fall under this category⁸². Additionally, Google has become exclusive search provider to high volume websites like Amazon. This, consequently, reduces the likelihood of newer search providers finding area of service⁸³.

On the same lines Apple and Amazon were also involved in exclusivity arrangements. Audible is the audiobook subsidiary that belongs to the e-commerce giant Amazon.⁸⁴ The terms of the agreement didn't allow Apple to purchase digital audiobooks from other suppliers making the entire arrangement anti-competitive as other suppliers would end up missing on a huge customer base and Amazon would be in a position that is unreasonably dominant. The agreement had been in place for over a decade, since 2003, but came to an end as a result of the companies' own decision to end this exclusivity agreement.⁸⁵ However there were investigations held, but

⁷⁹ *Id.*

⁸⁰ EU – Challenges of a Digital Economy, *supra* note 45.

⁸¹ Ritter, *supra* note 76.

⁸² *Id.*

⁸³ Damien Geradin & Monika Kuschewsky, *Competition Law and Personal Data: Preliminary Thoughts on a Complex Issue*, <http://ssrn.com/abstract=2216088> (Last visited 28 March 2018) [hereinafter “Geradin&Kuschewsky”].

⁸⁴ *Audible: Audio books and Original Audio*, <https://about.audible.com/> (Last Visited 28 March 2018).

⁸⁵ Jacob Kastrenakes, *Apple and Amazon end decade-long audiobook exclusivity deal*, THE VERGE, <https://www.theverge.com/2017/1/19/14323438/apple-audible-exclusivity-agreement-ended-antitrust-investigation> (Last visited 28 March 2018).

were suspended due to the voluntary decisions made by the companies. “*This will enable a wider range of offer and lower prices for consumers*”, Andreas Mundt, President of Germany’s Anti-trust Agency, claimed in a statement.⁸⁶

Not only advertising agreements, Google has also been alleged of its involvement in distribution agreements under which Google search related products and services, such as toolbars and web-browsers came as default setting in various products of software vendors, hardware manufacturers and service providers. For instance, Google signed exclusive deals with Mozilla Firefox, Opera and Apple Safari, whereby each of these browsers is delivered with Google as the search default.⁸⁷

One important example in this category of cases is the one directed against online hotel agencies HRS and Booking.com. These agencies had a clause in their contracts with hotels, that obliged the hotels to always offer the best price on the platform with no possibility of deviating from the contract and not letting any other competitor to offer a price lesser than what they are offering. There is something very interesting particularly about these kinds of clauses in a contract as they have the ability to direct network effects in the parties’ favour. Best price clauses offer a two-fold arrangement for both, the platform and the hotels. Platforms get higher attraction from the users and consequently it benefits the hotels as well. This could ultimately result in the foreclosure of the market. For innovative newcomers like Justbook mobile, it was not possible to enter the market by providing the customers any incentives, such as offering hotel rooms at good conditions or extended check-in or check-out timings because HRS would always be able to offer less or at least the same price. The Bundeskartellamt, the German competition authority saw this as a clause that restricted competition and prohibited the use of such most-favoured-treatment clauses.⁸⁸

A major segment of digital platforms function on the user data which is recorded by the usage trends of the consumers. Exclusivity agreements let online service providers gather large amount of user data. This user data is further used for behavioural advertising that means selective advertising for users as per their usage trends. Personal data allows online service providers to offer relevant services based on user interest through means of advertising. For instance, when a user searches for a franchise food joint he will be especially interested in a joint that is located near him. Search engines are expected to cater the user to the relevant interests that they possess.

⁸⁶ *Id.*

⁸⁷ Geradin & Kuschewsky, *supra* note 83.

⁸⁸ RupperechtPodszun & Stephan Kreifels, *Digital Platforms and Competition Law*, 5 EUVR1 33–39 (2016).

Knowing the interests and preferences of a given user contributes to the ability of search engines like Google or Bing to deliver results relevant to that particular user. Quality in terms of the relevance of the results is the only thing that matters to the user which entirely depends on the ability of the online service provider to tailor users' services to their specific needs.⁸⁹

Dominant companies have accumulated years of user data that makes it easier for them to indulge service providers into exclusivity arrangements. As a result of which they tend to furnish a monopoly in the markets leaving no competition.

4. Towards a coherent regime

The abovementioned challenges to the competition authorities in dealing with the firms involved in the digitalised economy are very limited. The challenges and problems persist at every level of the market analysis. All the challenges described above illustrate well, that the ultimate aim of the market analysis in this sector should be to focus on business models. It is a viable idea to change the primary focus from what constitutes as a substitute for the end-user, to all the external elements and interdependencies of the platforms in this economy. Analysing the mode of generation of profit and turnover of the firm should be the primary aim of the competition authorities. Competition authorities should also look up to the potential competitors and parties who hold the potential to steal profits from the incumbents.⁹⁰

SHIFT OF FOCUS

Regarding the challenge pertaining to market definition, the approach dealing with *reasonable substitutability*⁹¹ needs to be overturned in cases pertaining to the digital economy. It is suggested that the competition authorities, while defining the relevant market, should adopt a much more behavioural approach in doing the same. Further, there is a need to consider all the effected markets pertaining to a multi-sided platform to assess the influence of any decisions of the same in all the related markets. For example, Google, the search engine also acts as an advertising body, among other areas of operation.⁹² Any decision which increases the search users' base of Google Inc. is likely to increase its Advertisers' user base as well, owing to the related indirect effects. Competition authorities, in cases involving parties like Google Inc., should take all

⁸⁹Geradin&Kuschewsky, *supra* note 83.

⁹⁰ EU – Challenges of a Digital Economy, *supra* note 45.

⁹¹ Roger D. Blair & Jill Boylston Herndon, *Market Definition: An Introduction*, 28 J. REPRINTS ANTITRUST L. & ECON. 3, 12 (1998).

⁹² Evans & Noel, *supra* note 33.

related aspects into consideration. A failure to do so is likely to result in flawed approvals or rejections, which may have degrading effects on the competition and innovation in the market.

TESTING BENCHMARKS

The benchmark tests and the tools used for market analysis need to be altered to cater with the needs of changing economic environment. The SSNIP test is one of the widely used tests for this purpose.⁹³“The objective of SSNIP test is to determine, in as much scientific and systematic way as possible, identify and define the boundaries of competition between firms.”⁹⁴ The inapplicability of these tests in zero-priced markets of digitalised economy is a major concern for authorities.⁹⁵The “*First Streamcast Fallacy*” made it evident that a nominal price increase is meaningless when the benchmark price for a market is zero.⁹⁶A lot of products in the digitalised economy are sold for zero prices, with collection of consumer data for commercial purposes, a consideration. This is the case with platforms like YouTube, Facebook, Google, etc. The present tests like SSNIP or the *Hypothetical Monopolist Tests*⁹⁷, rely mainly on price mechanisms instead of the market behaviour. It has been suggested that quality of services/products offered should be made an indicator with use of a Small but Significant non-transitory decrease in Quality (SSNIQ).⁹⁸ However, this approach needs to be applied with extreme caution as the firms enjoying market power in some zero-priced markets are unlikely to choose to exercise that power by lowering quality.⁹⁹Until consumers, content providers, advertisers or any agents of the platform do not transact among each other, a different market should be defined for all sides of the platform.¹⁰⁰ Further, all the externalities imposed on the remaining sides should be considered by the authorities, with implementation of a slightly different SSNIP test which evaluates the impact of a change in price on the comprehensive profitability of the firm.¹⁰¹ However, there still aren’t easy answers to many questions, for instance, where one side of a platform subsidises the other, what happens when one side benefits, while other incurs losses? There might be a case where efficiency results in benefit of advertisers in multi-sided markets, by targeting behavioral advertisements in a more targeted manner. This might be made possible

⁹³Kaushal Sharma, *SSNIP Test: A Useful Tool, Not A Panacea*, COMPETITION LAW REPORTS 188-192 (May-Jun, 2011), http://www.cci.gov.in/sites/default/files/presentation_document/SSNIPTestKKSharma260711.pdf?download=1.

⁹⁴ Commission Notice on the definition of relevant market for the purposes of Community competition law, notice No. 97/C 372/03, 1997 O.J. (C 372/40) 5.

⁹⁵ David S. Evans, *The Antitrust Economics of Free*, 7 COMP. POL’Y INT’L 71, 72 (2011).

⁹⁶ John Newman, *Antitrust in Zero-Price Markets: Applications*, 94 WASH. U. L. REV. 49 (2016) [hereinafter “Newman”].

⁹⁷ Hypothetical monopolist test (HM test) (European Economic & Marketing Consultants - EE&MC), <http://www.ee-mc.com/tools/agreements/hypothetical-monopolist-test-hm-test.html> (Last visited 28 March 2018).

⁹⁸ OECD, *supra* note 2; see also Beijing Qihoo 360 Technology Co. v. Tencent Technology (Shenzhen) Co., (Sup. People’s Ct. 2013) (China), <https://www.competitionpolicyinternational.com/assets/DecisionTranslation.pdf>.

⁹⁹ Newman, *supra* note 96.

¹⁰⁰ Filistrucchi, *supra* note 34.

¹⁰¹ EU- Challenges of a Digital Economy, *supra* note 45.

through the consumer data collected by provision of free services to the user. This results in a reduction of the quality of privacy protection which is given to them as a consequence of behavioral advertising.¹⁰² In that case it becomes a challenge for the competition authorities to balance the gain to advertisers compared to the losses incurred by consumers, all based on a non-monetary unit of quality, likely in cases where SSNIQ or a modified SSNIP test is used.

RE-ASSESSING DOMINANCE

Even after the market is defined properly, the assessment of market dominance in the digitalised economy is a challenge to the authorities. As per Organisation of Economic Co-operation and development,

*A dominant firm is one which accounts for a significant share of a given market and has a significantly larger market share than its next largest rival. Dominant firms are typically considered to have market shares of 40 per cent or more.*¹⁰³

The European Court of Justice has defined a dominant market position as a position which comprises of economic strength manifested in an economic undertaking which gives it the ability to prevent effective competition in the relevant market, owing to its power of behaving independently of its competitors and consumers to an appreciable extent.¹⁰⁴ In their market analyses, authorities use quantitative indicators like market shares and price levels, which fail in application when the market is a zero priced one. Further, the market dynamics and innovation happening in the sector make it difficult to analyse a market, as notions like market dominance are subject to fast change over a comparatively shorter time period.¹⁰⁵ An example of this position is that of search engines like Yahoo! and AltaVista, which were the widely used search engines some nineteen years ago, unlike today.¹⁰⁶ Therefore, instead of traditional indicators of dominance, the authorities should pay reliance on the indicators which give a view of the contestability of the firm in terms of the entry-barriers that it raises, the ways to reach end-users, etc. Reliance should also be paid to whether the conduct of a firm leads to certain blockades on the routes to reach end-users. The activities of incumbents with respect to mergers reveal a lot about their targeted practices. In numerous mergers between incumbent firms and innovative,

¹⁰² OECD, *supra* note 2.

¹⁰³ *Dominant Firm, Glossary of statistical terms*, (The Organisation of Economic Co-operation and Development), <https://stats.oecd.org/glossary/detail.asp?ID=3199>. (Last visited 28 March 2018).

¹⁰⁴ United Brands case, *supra* note 49.

¹⁰⁵ EU- Challenges of a Digital Economy, *supra* note 45

¹⁰⁶ Adam Thierer, *The Rule Of Three: The Nature of Competition In The Digital Economy*, Forbes (Jun. 29, 2012), <https://www.forbes.com/sites/adamthierer/2012/06/29/the-rule-of-three-the-nature-of-competition-in-the-digital-economy/#6775ebd27a04> (Last visited 28 March 2018).

newer firms, which may hold a lot of relevant data, but not have a reflection of their value in terms of cash-income. Merger activities pertaining to incumbent firms with smaller innovators should be well scrutinised as the intention of incumbent behind acquiring such firms may be to remove the disruptive innovator out of the market. The question whether incumbent firm is working on similar innovations as well as the amount incumbents are willing to spend in such acquisitions tend to reveal a lot of the incumbents' intention behind the acquisitions. Such transaction thresholds exist in US and Mexican competition law Jurisdictions and are being considered by others.¹⁰⁷ Another option suggested for such mergers and acquisitions is requirement of notifiers to brief the use they will put the collected information from the merger to. However, this may limit firms' operations and involves strategic information of the notifiers.

Now, it must be seen that the most important question for competition policymakers is about the temporariness and non-temporariness of the position of any dominant player in the market. Clearly firms like Google, Facebook, Skype and eBay dominate their relevant markets and leave very little scope for any competitive edge. The question needed to be asked is whether these firms are protected from competition through entry barriers created by them or they enjoy profits only owing to their superior technology and faster innovation?¹⁰⁸

TAKING A STEP BACK

We are of the view that the modern day economy is a *Schumpeterian* Economy. Schumpeter's view of *perennial gales of creative destruction*¹⁰⁹ aptly defined the digital economy decades ago. The examples of MySpace, Yahoo!, Orkut, Nokia, clearly prove that even though a firm may reach a dominant position in the digitalised economy, but this position of such firms tends to be brief and the one driving most competition and innovation tends to win the race. Although, an approach may be defined beyond basic competition law principles to deal with digitalised economy, less intervention by the competition authorities is perceived best to let this economy flow in the way Schumpeter devised.

It is clear that in an argument being raised towards dominance of a firm in the market, there would be valid counter-arguments based on the innovation incentives. Therefore, with adoption of a more behavioral approach by the competition authorities, as long as a dominant firms'

¹⁰⁷ A draft amendment to the *Act against Restraints of Competition* by the German Federal Ministry of Economic Affairs and Energy was published. It proposed creation of a new threshold for the value of transaction set at EUR 350 million, alongside the existing thresholds pertaining to turnover.

¹⁰⁸ Haucap & Heimeshoff, *supra* note 5.

¹⁰⁹ JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM AND DEMOCRACY 81 (3rd ed., 1950), <http://www.compilerpress.ca/Competitiveness/Anno/Anno%20Schumpeter%20CSD%20Ch.%20VII%20Creative%20Destruction.htm>. (Last visited October 27, 2017).

strategies do not impose barriers on market entry of firms, not lead to a reduction in competition, are countered by low switching costs and multi-homing, there is less requirement of competition authorities' intervention in similar *contestable markets*.

A starting point for the same can be taking inspiration from the foreign competition law regimes and acting in line with what other competition authorities may be adopting, although, changes need to be in accordance with the nature of Indian Economy and policies. These changes need to come with trials and errors as time passes and the Indian regime becomes accustomed to the changes brought. Inspiration can be taken by Indian policy makers, from the German Parliament, *Bundestag*, which realized possibilities of a company dealing with zero-priced goods with insignificant turnovers and amended the Act against Restraints of Competition.¹¹⁰ This amendment realized the need of taking into consideration the intention of incumbents when acquiring a smaller firm. Therefore, introduced new threshold for merger notification where notification was made mandatory for mergers with purchase price and assumed liabilities amounting to more than 400 million euros.¹¹¹ Co-operation with other authorities worldwide to release solutions and discussions shall prove to be of major assistance in devising strategies in the dynamic economic environment.

5. Conclusion

Search engines, E-commerce and social networks are the major faces of any data driven economy. In the modern day, it is apparent that only a handful of firms dominate all these spheres of the digitalised economy. In this context, there is much skepticism among the competition authorities worldwide towards the modes and methods adopted by the leading firms in retaining the leader position that they hold in this economy. However, certain issues and challenges are faced when an attempt is made to conduct an analysis of these firms which seem beyond the scope of present modes and methods available for market analysis.

The competition laws have only been there in India for a very short time. This makes it obvious to say, that there is potential for numerous tests and tries in this area of law. The rise of digitalised economy is even fresher, an area of markets worldwide, with India contributing significantly to this economy. This area of Indian Economy, being one of the fastest growing

¹¹⁰ Rahul Goel, *Emerging Trends in Market Power: An Update*, Competition Law: A Cyril Amarchand Mangaldas Blog (July 25, 2017), <https://competition.cyrilamarchandblogs.com/2017/07/emerging-trends-market-power-update/> (Last visited 28 March 2018).

¹¹¹ Bryan Cave LLP, *Significant Changes in German Competition Law*, Lexology (Aug. 16, 2017), <https://www.lexology.com/library/detail.aspx?g=0661587d-c4c7-4363-8276-f32bc4c43cfc> (Last visited 28 March 2018).

areas, requires constant checks and balances. Further, the possibilities of firms in the digitalised economy engaging in anti-competitive practices are just as likely as in the brick and mortar or the traditional economy. Contrary to the traditional economy, the benchmark tests and techniques defined fail implication in the modern digital economy. This is a result of numerous factors, like the dynamic nature of the market, indirect network effects, multi-sided economy and zero-priced products. These factors, among others, result in making a numerical assessment of the market harder, as well as increase the area of market assessment to a significant extent. This results in plenty of challenges and a need for change in approach and techniques used by the competition authorities worldwide.

Although, significant changes aren't required in the laws as such, and the present-day laws do not require to be repealed. There is, however, a need for the competition authorities to change the way cases pertaining to digitalised economy are dealt with. A more behavioural approach towards such cases is recommended. Focus should be shifted towards business models to determine the mode of profits of the firms under scanner. Changes may also be brought to the present thresholds for notifications etc. Further, many key aspects of actions and steps taken by foreign competition authorities can be adopted with certain changes to apply them in the Indian markets. More challenges and changes are clear to be witnessed when the suggested changes are put into practice. The transition of approach towards a dynamic, digitalised economy is a gradual process and shall keep requiring change with changes in economy of a dynamic nature.