

# Data Monopolies and Antitrust: Examining Big Tech's Role in Market Dynamics and Innovation

Kritika Singh<sup>1</sup>, Dr. Gagandeep Kaur<sup>2</sup>

<sup>1</sup>Assistant professor national law university, jodhpur, and PhD student at, university of petroleum and energy studies Dehradun, Uttarakhand

<sup>2</sup>Associate professor university of petroleum and energy studies, Dehradun, Uttarakhand

Submission: 10/01/2024;

Received: 01/10/2024;

Revision: 11/03/2025;

Published: 26/03/2025

\*Corresponding author: Kritika Singh ([kritikal1oct@gmail.com](mailto:kritikal1oct@gmail.com))

**Abstract:** The quote seems apt in today's Big Tech<sup>2</sup> sector. Amid multiple hearings, reports, technological developments, legislative changes, etc. the world is still grappling with the repercussions and the scale of these companies' growth. The challenges posed by the companies to competition law are novel and thus, need an examination of the law itself, including its fundamental principles. One needs to realize that the financing of start-ups who are coming up with innovations is fundamentally different from previous forms of financing. The start-ups, due to the inherent risk, use venture capital financing

**Keywords:** Big Tech, Competition Law, Start-ups, Venture Capital Financing, Innovations.

## INTRODUCTION

"Competition whose motive is merely to compete, to drive some other fellow out, never carries very far. The competitor to be feared is one who never bothers about you at all, but goes on making his own business better all the time."<sup>1</sup>

- Henry Ford

The quote seems apt in today's Big Tech<sup>2</sup> sector. Amid multiple hearings, reports, technological developments, legislative changes, etc. the world is still grappling with the repercussions and the scale of these companies' growth. The challenges posed by the companies to competition law are novel and thus, need an examination of the law itself, including its fundamental principles.

Innovation is the source of technological progress which results in effective competition at present and in the future.

3 Therefore, harm to innovation should be evaluated besides the traditional valuation with an emphasis on pricing decisions of present competitors.<sup>4</sup> There has been a string of decisions in the EU jurisprudence<sup>5</sup> which deal with the change in approach to the issue of assessment of harm to innovation. The Indian jurisprudence also bends towards the EU approach historically. There are a lot of pending cases against the Big Tech Companies.<sup>6</sup>

The author would be discussing the following three pertinent issues surrounding the technology sector which directly impact the innovation in the sector: the conflict of interest of the Big Tech companies operating in multiple markets in part II, the alleged anti-competitive acquisitions by the big tech companies in part III and the necessity of licensing of data acquired by big data companies for promoting innovation in part IV. All these issues are directly related to the protection of existing and potential competitors. Each issue has been discussed in detail by stating the problems and the probable solutions to some of the issues arising out of the problems.

## BIG TECH & CONFLICTS OF INTEREST

One needs to realize that the financing of start-ups who are coming up with innovations is fundamentally different from previous forms of financing. The start-ups, due to the inherent risk, use venture capital financing.<sup>7</sup> There is presence of the Big Tech companies in the venture capital industries as well with Amazon's 'Alexa Fund', Google's 'Google ventures', etc.<sup>8</sup> This results in direct conflicts of interest with the other businesses using the Big Tech's resources and then ultimately, the Big Tech companies are allegedly harming these smaller companies in some way.

The conflicts of interest are not just limited to start-ups but there are other business owners (mostly small businesses) which use the platforms of the big tech to sell their products. These platforms, however, allegedly use their dual power to sell competitors' products and at the same time, manufacture similar products and move the small business owners out of the business slowly. The data which is acquired from the competitors is not made accessible to other competitors. However, platforms like Amazon still have it for storage in clouds or for providing their analytics services, unless it can be made sure that there is absolutely no conflict of interest. This, put simply, helps them understand consumer demand, inventory needs, advertisement costs, etc. All Amazon has to do is to copy the data and clone the product. Then they just bleed the competitors out and take control of the market. The question that the author wishes to address in part II is:

*What steps can be taken to remove the conflict of interest of the Big Tech companies operating in multiple markets?*

## THE WOLF IN WOLF'S CLOTHING: HUNTING THE THIRD-PARTY SHEEP.

For the alleged activities of taking advantage of its

competitors, Amazon has been called a “wolf in wolf’s clothing”.<sup>9</sup> It was stated by Amazon that it sees the sellers on its platform as its “partners”. However, as per multiple testimonies in the sub-committee hearings, it was alleged that Amazon was the major platform where products were getting sold and the sellers didn’t have any other option to switch to even if they wanted.<sup>10</sup>

#### **AMAZON ALLEGEDLY ABUSING THE ONLINE MARKETPLACE POSITION.**

There have been various instances where Amazon has used the network effects of its online seller market dominance to enter and disrupt the markets in other sectors. It coerced Pop sockets to enter into a \$2 million dollar deal for advertising.<sup>11</sup> Before the said deal, they were selling counterfeit products and immediately after the deal, the products of Pop sockets were shifted to the top of the search results.<sup>12</sup> A small notebook seller was removed arbitrarily from the retail platform and Amazon launched identical products soon after.<sup>13</sup> After facing tough competition at cheaper prices from Diapers.com which Amazon couldn’t match, it bled \$200 million to remove the company from competition, acquired it and then increased the prices of diapers.<sup>14</sup> All these instances visibly lead to harm to the consumers as well as the competitors. However, the issue presents a great threat to innovation as well.

#### **AMAZON ABUSING ITS DOMINANCE IN OTHER AREAS.**

It has abused its dominance in the venture capital area as well to steal proprietary information from small start-ups and businesses. Amazon had launched Alexa Fund, an investment vehicle, in 2015. Amazon has been alleged to use third-party proprietary data from small start-ups via its venture capital arm and then use the information to launch its private label products. These products compete with the products of Amazon, often ending in disastrous results for the start-ups.

The relationship between intellectual property law and competition law can be said to be both, complimentary and antithetical to each other.<sup>15</sup> IP is inherently pro-competitive because it ensures the protection of a business’s intangible assets, enables fair market competition, promotes innovation in the market place, and thereby competitiveness.<sup>16</sup> However, if the allegations come to be true, unfair competition is affecting the IP of small businesses and start-ups.

Amazon provides cloud computing services via its Amazon Web Services arm. It hosts similar services to that of Prime Video on Netflix & Hulu.<sup>17</sup> It has been alleged by Finecrap Corp. that Amazon launched a similar service by obtaining such proprietary data.<sup>18</sup> Similar allegations have been made by Williams-Sonoma that their registered service mark (WILLIAMS-SONOMA) had been infringed by Amazon.<sup>19</sup> It has been alleged that Amazon was using a section of the Amazon site was displaying its products and didn’t make it clear that they were not coming directly from Williams-Sonoma.

#### **OTHER INSTANCES OF THIS EXPLOITATIVE BEHAVIOUR**

It must be realized that Amazon is not the only big tech company exploiting the smaller fish. Genius Digital had

inserted a watermark in morse code<sup>20</sup>. The Google lyrics contained the same watermark. Pichai replied that they licensed data from other companies and thus, it was a dispute between other companies and Genius.<sup>21</sup>

The role of the Big Tech companies as gatekeepers<sup>22</sup> also needs to be examined. Google and Apple at their respective stores, Google the online seller’s market and Amazon at the e-commerce market level exploit the other businesses selling their products on their respective stores. The case of *Apple v. Pepper et al.*<sup>23</sup> was admitted to the US SC in a 5:4 decision regarding the application developers who were selling their products via the Apple App Store.

There are multiple other examples of these kinds. The author has tried to cover the key areas where the conflicts of interest arise. Now, the author would like to analyse the two possible alternatives which are potential solutions to the problem.

#### **WHAT ARE THE POSSIBLE STEPS TO THE CURB PROBLEM OF THE CONFLICT OF INTEREST?**

- **SELF-REGULATION: THE USAGE OF INFORMATION BARRIERS.**

The author has refrained from using the term “Chinese walls” due to its ethnic focus and linguistic discrimination.<sup>24</sup> Instead the term “information barriers” has been used. The use of information barriers has been made by companies in the financial markets to prevent conflicts of interest.<sup>25</sup> There is a dearth of case law on the issue in India. Thus, the author have relied on foreign case laws.

The principle can be made applicable within the company to prevent one of its divisions from accessing data with other divisions. All permutations have not been covered by the author. However, it can be realized that there are a large number of conflicts which have arisen due to the incredible growth the companies have achieved.

Empirically, however, it has not proven to be a very effective method.<sup>26</sup> In the Sub-Committee hearing part 6, it was stated by Mr. Bezos himself that he “*couldn’t guarantee*” that the policy had not been violated.<sup>27</sup> There was a company policy in place but no one was keeping a check. As was noted in the abovementioned hearing, a former Amazon employee testified before the committee that it was a “candy shop” where anyone could obtain whatever data they wanted.<sup>28</sup>

Ideally, the different divisions which can have an access to sensitive information from other divisions must be physically separated from the other. It needs to be done to ensure no exchange of information even unintentionally (via copies left on printers, files getting exchanged, etc.). However, even if that can’t be ensured there must be clear demarcations between the different offerings of the company.<sup>29</sup> The use of a ‘restricted list’ must be made by the companies. If one division of the company possesses

confidential and potentially harmful information, that information should be made inaccessible to the other divisions of the company (wherefrom harm to competition can arise).<sup>30</sup>

#### ▪ **BREAKING THE COMPANIES UP.**

In the landmark judgment of *Standard Oil Company v. United States*<sup>31</sup>, the Standard Oil Trust was broken down into over 30 companies. In the *AT&T* case, the companies were broken down into 34 separate companies due to the company being considered a monopoly.<sup>32</sup>

On being asked if the companies would prefer being broken up, the CEOs replied in the negative.<sup>33</sup> It was stated in the sub-committee hearing that the consumers would also want a one-stop shop. However, as stated above, self-regulation hasn't proven to be effective. Moreover, in cases like these, assessment of harm to competition after a violation has been committed will do immense harm and the ways of restoring the competition would be incredibly tough and technical. Thus, there should be pre-emptive steps like separating businesses having an inherent conflict of interest with other businesses in the company.

It has been the electoral mandate of a number of US presidential candidates to split up the Big Tech companies as well.<sup>34</sup> Though there are multiple reasons for doing the same like the political ad campaigns, the potential political power these platforms possess, et cetera, it certainly is an option which is considered to be viable by many candidates.<sup>35</sup> The president of the US, Mr. Joe Biden, had clarified his stance on the issue pre-elections, stating that though the issue of breaking up would be something he would "take a really hard look" at but also stated that it was "premature" to make a final judgment.<sup>36</sup> Now, he has started his campaign against the Big Tech companies. He has passed an executive order, mandating a slew of measures against the Big Tech companies.<sup>37</sup>

In the Indian scenario, the power to break-up a company abusing its dominant position is present in §28 of the Competition Act, 2002<sup>38</sup>. This can be a viable alternative with regard to huge conglomerates like Reliance Industries, which have ventured into myriad markets. In the US, it could lead to splitting up of companies like Amazon into AWS, Amazon and Amazon fulfilment.<sup>39</sup> Facebook could get split into Facebook, Snapchat, Instagram and WhatsApp &

Facebook Analytics.<sup>40</sup> Google could get split into Google, Google Cloud, Google Analytics and YouTube.<sup>41</sup> Moreover, breaking up of companies doesn't necessarily mean diminishing its value. The 'Baby Bells' created after the breakup of AT&T corporation in the Modification of the Final Judgment were more valuable than AT&T after 10 years. It resulted in maximizing benefits to the consumers by reduction in costs of the telecommunication services.<sup>42</sup> Thus, it results in maximizing of shareholder value as well.<sup>43</sup>

#### ▪ **PREVENTING THE CONFLICT OF INTEREST.**

On January 20<sup>th</sup> 2022, the American Innovation and Choice Online Bill was approved by the

U.S. Senate. The Bill aims to control the abuse of dominance by 'covered platforms' operating over the internet. §2(h)(3) of the Bill defines 'covered platform' as the online platform having at least fifty million US-based monthly active users, or one hundred thousand US-based business users. §2(a) makes it unlawful for any person operating such 'covered platform' from giving unfair preference to the platform operator's own product or services over the product and services offered by other business users on the covered platform if such preference would 'materially harm competition on the covered platform'.

For instance, assuming that the Google Play Store's search engine qualifies as a covered platform, then the promotion of its own application like 'Google Pay' in its search results in priority to other products, which results in material harm to the competition, would be unlawful conduct punishable under the proposed law. This is a welcome step to prevent harm to the competition competing on their platforms.

Section 4 of the Competition Act prohibits the abuse of dominance. 'Dominant position' is defined as a position of strength enjoyed by an enterprise within its 'relevant market'. Section 4(2)(a) prohibits the imposition of unfair or discriminatory conditions or price on purchase or sale of goods or services. Section 4(2)(e) prohibits the abuse of dominance within one relevant market to enter into another relevant market. In India, these provisions prevent the abuse of dominance of the Big Tech in the other markets.

In the two recently held cases against Google and Apple's App Stores, the CCI has held that the high fees charged by Google reduced the app developers' ability to compete with the products offered by Google.<sup>44</sup> Google's conduct was prima facie found anti-competitive and violative of section 4(2)(a) of the Competition Act. Similarly, in December 2021, the CCI found Apple's App Store abusing its monopoly through unfair conditions violating section 4(2)(a) of the Competition Act.<sup>45</sup>

Moreover, besides the above 2, the CCI has also asked for its Director-General to initiate investigations against anti-competitive practices adopted by the e-commerce giants, Amazon and Flipkart. In its order, the Competition Commission found that both the companies have been discriminating between their 'preferred sellers' and other "regular sellers".<sup>46</sup> The DG's report for is pending and should be expected in some time.

sale of goods or services. Section 4(2)(e) prohibits the abuse of dominance within one relevant market to enter into another relevant market. In India, these provisions prevent the abuse of dominance of the Big Tech in the other markets.

In the two recently held cases against Google and Apple's App Stores, the CCI has held that the high fees charged by

Google reduced the app developers' ability to compete with the products offered by Google.<sup>44</sup> Google's conduct was prima facie found anti-competitive and violative of section 4(2)(a) of the Competition Act. Similarly, in December 2021, the CCI found Apple's App Store abusing its monopoly through unfair conditions violating section 4(2)(a) of the Competition Act.<sup>45</sup>

Moreover, besides the above 2, the CCI has also asked for its Director-General to initiate investigations against anti-competitive practices adopted by the e-commerce giants, Amazon and Flipkart. In its order, the Competition Commission found that both the companies have been discriminating between their 'preferred sellers' and other "regular sellers".<sup>46</sup> The DG's report for is pending and should be expected in some time.

#### **DIGITAL LAND GRABS & MERGER CONTROL**

Another major consideration is the innovation getting harmed by allegedly anti-competitive acquisitions and mergers. In the US, not even 1 merger/acquisition has been blocked by the US Department of Justice in the Technology sector.<sup>47</sup> The same is the case with UK as per the Furman report.<sup>48</sup>

Right now, as per section 20 of the Competition Act, 2002 the CCI inquires about the anti-competitive effects of a particular combination. In the Competition Law Review Committee (CLRC) Report, they recommended additional thresholds for the digital markets which aren't structured traditionally. These thresholds are on the basis of the transaction/deal value of the merger. Moreover, the report also discusses the factors to be introduced for an analysis of the adverse effects on competition under section 20. The author has not delved into these issues which have been analysed in the report.

A lot of the Big Tech companies acquire their competitors. This behaviour has been called digital land grabbing<sup>49</sup> - a potentially harmful way to eliminate competition, i.e. acquiring it.<sup>50</sup>

The question which the author aims to answer in part IV is:

*Besides the changes proposed by the CLRC report, is there a need to shift the burden of proof on the big tech companies themselves to show an efficiency created in the market by a particular acquisition?*

#### **EXAMPLES OF COMPANIES ACQUIRING COMPETITORS**

Amazon acquired Diapers.com<sup>51</sup> and there was a resultant price war where Amazon bled 200 million USD and bought it eventually. The prices for diapers increased post acquisition. Thus, effectively harming the consumers (an outcome which is defeats the purpose of competition law in all jurisdictions).

Google acquired Double-click and combined data from all apps to create personalized recommendations for advertising. 80% of the revenue of Google comes from advertising.<sup>52</sup>

FB acquired Instagram and there is a mail which records the statements of Mark Zuckerberg where he reasons that the acquisition was "to neutralize a competitive threat".<sup>53</sup> The FTC voted unanimously to allow the transaction. The

acquisition passed the Snell test. The FTC might have made a mistake.<sup>54</sup> Sheryl Sandberg said while making a presentation: "95% of social media is Facebook".<sup>55</sup> Facebook allegedly threatened to clone other applications or competitors' products like Instagram or Snapchat and then placed an offer to acquire it.<sup>56</sup> Facebook acquired data from the acquisition of a web analytics company, Onavo<sup>57</sup>. Then Facebook research App also got banned from Apple App store for similar reasons.

The surprisingly humongous extent of the acquisitions of the Big Tech companies can be explored in multiple articles.<sup>58</sup> They have been inorganically growing for a long time now.

#### **SHOULD THERE BE A SHIFT IN THE BURDEN OF PROOF?**

A need for shift in burden of proof, when the dominance of a particular player in the market increases, has been felt in the sub-committee hearings.<sup>59</sup> The Stigler report mentions that there needs to be a shift. It should be a burden on the big companies to prove the efficiencies which would get created out of the merger and not the other way around. Even the Furman Report has recommended it.<sup>60</sup> The reasons which have been given by the reports as well other cogent reasons are:

1. Creation of a Digital Authority (DA) which imposes regulations to lower the burden of proof. It has been stated in the Stigler Report that the role of the body shall be equivalent to the role of the FCC.<sup>61</sup>
2. The parties have a greater ability to know what they are and the information they possess.<sup>62</sup>
3. Resource constraints with FTC have been cited in the hearings to be yet another reason for shifting the burden of proof. The same can be said to be the case with the CCI, be it the human resources<sup>63</sup> or financial resources in comparison to the huge companies.

These considerations need to be looked at for arriving at any policy decision about the eruption of such platforms in India as well. Moreover, the author would like to recommend that instead of forming a completely new body merely for the examination of mergers in the digital sector, an expert panel can be established which decides on the issue of the applicability of the reverse burden of proof on a case-by-case basis. The examination would be highly technical and thus, a body of experts would be able to judge the situation better.

#### **LICENSING & INTEROPERABILITY OF DATA**

Firstly, it needs to be examined whether data can be considered an "essential facility" in the sectors like social media, search engines, etc.

#### **DATA AS AN "ESSENTIAL FACILITY".**

The essential facility doctrine may be referred to as a 'mandatory access remedy' which forms a part of "refusal to deal" cases that restrict a monopolist's ability to prohibit real or future competitors from competing with it by refusing access to a so-called essential good or service, leading to foreclosure of the market.<sup>64</sup> A firm that holds a

scarce facility has an obligation to offer fair access to it to competitors.<sup>65</sup> Where facilities cannot be practically duplicated by potential rivals, those in possession of them must allow them to be shared on fair terms. The foreclosure of the scarce facility is an unfair/illegal restriction of trade.<sup>66</sup>

In US Trinko<sup>67</sup> judgment, it was straightforward from the US Supreme Court that "if a company does not have an antitrust obligation to negotiate with its wholesalers, it has no obligation to negotiate with them under terms the rivals consider commercially beneficial." The Supreme Court did not mention the wider necessary facilities doctrine, as applied by lower courts to Trinko during its consideration of "restricted circumstances under which the unilateral failure to negotiate with rivals may lead to antitrust liability."<sup>68</sup>

The EU competition regime focuses on the idea of prohibiting exploitation by dominant undertakings; on the other side, the US competition regime aims to restrict undertakings from monopolizing the market.

Under the EU competition regime, *IMS Health* case<sup>69</sup> was crucial in setting the conditions for 'refusal to deal' cases. IMS Health (The world's biggest data provider for sales and medication prescription) developed the "1860 brick structure", for compiling this information which was protected by copyright. IMS brought an action against NDC claiming the violation of the copyrights of IMS by NDC 'Data collection system', with the subsequent reference to the European Court of Justice ("ECJ")<sup>70</sup>, the ECJ provided certain conditions to be met for denial of a licence.

In accordance with current EU guidelines, four criteria relate to refusals to deal with critical facilities<sup>71</sup>:

- I. The refusal concerns a good or process that is "indispensable" for carrying out a specific operation in the downstream market.<sup>72</sup>
- II. The denial is such that significant competition on the downstream market is removed.<sup>73</sup>
- III. The refusal prevents the emergence of a new product which customers might order.<sup>74</sup>
- IV. The rejection is not objectively justified<sup>75</sup>

These four standards have been adopted in India as well in the cases of *Arshiya Rail Infrastructure Limited (ARIL)*<sup>76</sup> & *Shamsher Kataria*<sup>77</sup>. The point, in this case, was that CONCOR, a PSU, was refusing to keep the private train container from accessing the terminals and sidings that were solely operated by them. The private train containers (including the petitioners) argued that these facilities would fall under "essential" freight infrastructure and hence essential facilities doctrine would be applicable. Whilst rejecting this assertion, CCI made the following remarks about the doctrine of essential facilities:

*"the essential facility doctrine is invoked only in certain circumstances, such as existence of technical feasibility to provide access, possibility of replicating the facility in a reasonable period of*

*time, distinct possibility of lack of effective competition if such access is denied and possibility of providing access on reasonable terms."*

Now, analysing data on these parameters, it can clearly be seen that the "indispensability" criterion is not satisfied, prima facie. Companies can always open their own search engines and social media sites and acquire their own customers and search queries. Data is a non-rivalrous resource. However, these things need to be analysed in the terms of network effects, high data acquisition costs of companies, the consumer inertia and other factors.

The Furman Report states that a "single-homing foreclosure"<sup>78</sup> arises if consumers have high switching costs such as the loss of valued personal data or at switch-point indicators; contracts that prohibit switching; technological obstacles such as complicated switching processes or a lack of interoperability between the old and the new or second-service systems.<sup>79</sup>

Moreover, the concepts from behavioural economics can also be applied in the analysis. A concept called "consumer inertia" arises out of behavioural economics.<sup>80</sup> It means that consumers might have a perceived lack of differentiation, a passivity to choice of their service, time constraints, etc. which allow for a brand to get away with poor service as the clients perceive the costs of switching to be high. In the meantime, the Big Tech can try and replicate their service and launch a similar product. These realities must also be analysed before making any policy for the digital markets.

Thus, interoperability of personal data needs to be ensured in any case. It is the need of the hour. It allows immediate transfer of personal data which makes the market competitive and also, allows reducing the inertia in minds of consumers of not having to enter their data if they want again. It has been explored in the next sub-part as well.

#### **NETWORK EFFECTS & INTEROPERABILITY OF DATA NETWORK EFFECTS.**

Peter Thiel has explored the idea of network effects in his book *Zero to One* and recommends the model to be adopted for start-ups.<sup>81</sup> However, for the establishment of network effects, you need a large number of users and it takes time.<sup>82</sup> The math regarding the network effects can be explained by something in mathematics called "graph theory". The more number of nodes (users) are there, the more rise there is in the value of the network. This idea has been explored using two key mathematics-economics theories:

##### **(i) Metcalfe's Law**

It states that the value of the network is calculated by squaring the number of nodes ( $n^2$ ).<sup>83</sup> In 2013, Metcalfe provided proof of his law when he used Facebook's data over the previous 10 years and that the value arose in direct proportion to the square.<sup>84</sup> In 2015, Zhang, Liu and Xu tested Metcalfe's laws from data acquired from

Tencent in China and Facebook.<sup>85</sup> The research showed that Metcalfe's law proved to be true for both, even when there were differences in the number of people having accounts on the 2 networks. However, since Facebook has over 2 billion users, it definitely has a larger network, giving it more value. It has been stated at multiple times that data might be overvalued or doesn't give that big a competitive edge to the company.<sup>86</sup> However, the sheer volume of data generated makes the companies better off<sup>87</sup> because the analysis tools being used are mostly same and so are the techniques.

### (ii) Reed's Law

There is exponential rise in the number of interactions ( $2^n$ ). This is known as the Reed's law.<sup>88</sup> He states that Metcalfe's law understates the value created by a group-forming network [GFN] as it grows. If there is a GFN with  $n$  members and you add all the possible 2-person, 3-person groups, and the like, then those members would form the groups possible, which is equal to  $2^n$ .

### INTEROPERABILITY OF DATA

The FTC has intervened in the rise of tech giants in the past as well and the market didn't regulate itself as claimed. The example of Microsoft would probably be suitable though not ideal<sup>90</sup> for drawing an analogy. Microsoft was forced to make the consumer data interoperable with its competitors' products.<sup>91</sup>

The interoperability of data is extremely important. The same has been stressed in multiple reports as well. The CLRC report has also recognized the importance of various factors like scale, network effects, etc. which lead to the emergence of leader.<sup>92</sup> The interoperability and data give any competitive business the incentive to innovate and thus, leads to consumer welfare as well. The Chicago School economists argue that innovation will drive the current dominant players out of dominance like it has till now. However, a necessity for this innovation to arise is the possibility that innovation can happen without consumer data/ public data. As stated in the

Thus, interoperability is definitely a remedy which needs to be used by the CCI and other regulators all across the globe. It needs to be incorporated in the competition policy. However, there is the public data/ non-personal data as well which can easily be licensed to the competing companies for their business activities, if needed. In part IV, the author would like to address the following question:

*Should there be a licensing of non-personal data in possession of Big Tech companies? If yes, on what terms?*

### LICENSING OF DATA AS A REMEDY?

It has been held that a unilateral refusal to license is considered to be an abuse of the dominant position as it prevents the entry of new products in the market.<sup>93</sup> There is direct consumer harm when the competition gets reduced in this way. In the *Microsoft case*<sup>94</sup> as well, the refusal to supply information so as to enable interoperability of data was held to be reducing competition. It was held that the

consumers would be harmed when there would be unequal competition in the market.

A case can be made that the licensing of the data can be justified on the ground that it is an 'essential facility' without which a new entrant into the market can't prosper. This can be tested on the 'essential facilities doctrine' elucidated in multiple case-laws. Thus, there needs to be interoperability of personal data and systems with open source.

However, the issue arises with regard to non-personal data, which also constitutes a large chunk of the data available. To put it simply, any data via which a user can't be identified is non-personal. It clearly gives the data about the public as a whole. How it is to be analysed is the Data Analytics part of the process. But having the public data can be immensely helpful in knowing the public demands and behaviour. The data creates a 'feedback loop' which in turn transforms into a monetising feedback loop, which directly creates a competitive advantage to the incumbent businesses and makes it a barrier to entry in digital markets.<sup>95</sup>

The author is of the view that non-personal data should be licensed. However, with the following conditions:

- (i) The data should be licensed on fair reasonable and non-discriminatory terms.

China recently redrafted its Guidelines on Anti-Monopoly Enforcement for Intellectual Property.<sup>96</sup> It has been contended that certain provisions of the Guidelines could penalize IP

producers rather than encouraging innovative activity.<sup>97</sup> Exempli gratia, the compulsory licensing of IP requirements in the guidelines get invoked when a company has 'acquired a dominant market position'.<sup>98</sup> However, the worrisome aspect of these compulsory licenses for patents is the rates which are far below market value<sup>99</sup>, the definition of what constitutes a "dominant market position" remains unclear and whether acquiring the said position is being penalized. In India, however, the definition of a dominant position is relatively clear and needs to be implemented on the basis of the precedents. For guidance on how to license the data, EU can be looked at as a model. In the EU, the fair, reasonable and non-discriminatory licensing (FRAND) approach has been applied to licensing the non-personal, public data.<sup>100</sup> The refusal to license data has been held to be an abuse of dominant position in *Milan*.<sup>101</sup>

It can clearly be inferred that if the Big Tech companies are receiving the licensing royalties, they are not being punished for being Big. Instead, their work would get the returns to company and promote competition at the same time. Thus, if the companies are receiving returns, then the remedy can be exercised.

- (i) There must be anonymity of data.

The issue of licensing comes into direct conflict with

the data protection of consumers. The problem stated simply is: the more number of companies that have one's data, the more susceptible is it to be hacked or misused. The issue regarding the sensitivity of personal data is not within the domain of competition law.<sup>102</sup> It is to be decided on the basis of data protection laws.<sup>103</sup> Thus, there need to be some considerations kept in mind for implementing licensing of data.

In the case of *Patrick Breyer v Bundesrepublik Deutschland*<sup>104</sup>, anonymized data has been defined as the data when

*“the identification of the data subject is prohibited by law or practically impossible on account of the fact that it requires a disproportionate effort in terms of time, cost and man-power, so that the risk of identification appears in reality to be insignificant”.*

Now, the unstructured/raw data can be shared on an anonymized/pseudonymized basis. It has been happening in the case of sharing data in the medical records.<sup>105</sup> However, since previous attempts at anonymization of data have failed and it is an incredibly complicated process, people are sceptical of the process.<sup>106</sup> A risk-based approach needs to be adopted with the aim of bringing it to a zero-risk approach. These issues need to be addressed and can be addressed. They shouldn't be considered to be obstacles in the process.

Moreover, the main benefit derived from the data the big tech firms have is in the form of behavioural advertising. The data being shared right now is majorly Application Programming Interfaces (APIs)<sup>107</sup> for bare minimum access to information of a user like his/her friend's list on social media platforms like Facebook, access to APIs Google maps in the case of Google, etc. However, the personal and even the hasn't been shared, which makes the data analytics market incredibly difficult to enter into.

**BAYER-MONSANTO MERGER AS  
A BIG DATA CONCERN IN  
FOREIGN JURISDICTION (US)**

(ii) CCI (Competition Commission of India) approval of the acquisition of Monsanto by Bayer AG (subject to modifications)

By order of 14 June 2018 the CCI approved Bayer Aktiengesellschaft (Bayer)'s proposed acquisition of Monsanto Company (Monsanto). The CCI accepted the proposed combination, subject to certain remedies proposed as modifications to the combination.<sup>108</sup>

CCI noted that the transaction was characterised by a clear effect on the portfolio, allowing a transaction business to combine its features, seeds, and crop protection goods, in a way that would favour consumers and deter competition. According to CCI, after acquisition, the parties will raise market strength by adapting their global digital applications to Indian agriculture and building a one-store platform for the seed and characteristics value chain and for the agrochemical supply chain. CCI also found that agro

data pooling by the parties offered another source of greater strength in the market.<sup>109</sup>

(iii) CCI's Competition Assessment (Data Concerns).

- Monsanto and Bayer's solid place in traits library and R&D activities (Genetically Modified Traits) would provide a combined entity with a strong position in traits. The enormous competitive advantage in and large-scale applications (Big Data) technology is affected by advantages, thereby increasing its leading position in farm biotechnology and sector entries.
- It was noted that the parties have different licencing agreements with players worldwide, including Dow, DuPont, BASF, Syngenta etc, with the objective to diversify their genetic databases.
- The group would have an essential genetic database for diverse plants that could limit its need to diversify its genetic databank from others.
- With the likely benefit to deny licensing of such data to competitors, such denial could lead to the creation of substantial entry barriers for existing players and new entrants. They will not be able to compete successfully on the market using the appropriate genetic database.
- Therefore, the parties have access to already existing agro data and then collect and produce further data, leading to data integration for the combined entity. To compete effectively with the merged organisation, access to such data would be essential for any market participant. The combination proposed will probably lead to enhanced barriers to entry for potential market entrants who are unable to access the necessary field data and find it difficult to replicate the status of existing market participants.

(iv) Proposed Modifications in relation to data access.

- The Entity shall, on equal, equitable and non-discriminatory terms, grant access to potential licensees approaching the Combined Entity through non-exclusive Indian agro-climate data is held and applied by the Entity.
- The Combined Entity would give access to Indian agro-climatic data for a period of 7 years, free of charge to institutions of the Government in India must be applied exclusively by institutions of the Government of India to establish a public good in India.
- With a view to this, the Entity would enable prospective licensees to sign licencing contracts with 3<sup>rd</sup> party providers by only revealing the names and basic details of 3<sup>rd</sup> party data suppliers used by the Merged Entity to provide agro data, provided that the Entities are unable to disclose any data.

Bayer planned to use large-scale data processing, for other data structures such as Digital Farming Application. The risk of misuse opens the door to an exclusive quasi-monopoly of big data, and it is worth noting that Bayer

refused to dilute its access to Digital Farming Network of the European Union. Furthermore, the fact that the Russian anti-trust regulator has adopted this condition to allow merger is a matter to be observed.<sup>110</sup>

## CONCLUSION

The conflicts of interest are not removed by the informational barriers imposed by the companies internally. Thus, there needs to be a break up of different verticals of the big tech companies into physically separate organizational structures to prevent these conflicts of interest.

Efficient merger control indirectly leads to benefits to consumers in the concerned market. An overhaul of the current burden of proof principles and application of the 'reverse burden of proof' will ensure an efficient merger control mechanism. Licensing has been extended on many occasions to physical infrastructures and intangible properties protected by rights of intellectual property. The question is whether and how to apply licensing requirements to data. The problem poses new issues due to the personal nature of the data and the peculiar business model of online platform providers. It may require a different review under current competition laws.

There are other recommendations like having an expert sectoral regulator to look after the implementation of the antitrust remedies as done in *Otter Tail* case<sup>111</sup>. These remedies can also be adopted moving ahead in the Indian regime. The data protection and data privacy issues arising from the Personal Data Protection Bill, 2019 will play a huge role in determining the competition law policy in the future. There are other issues like definitions of relevant markets, opt-in contracts for behavioural advertising, etc. which are beyond the scope of the present paper and can be analysed in future research endeavours. The the American Innovation and Choice Online Bill & the pending investigations upon finalization also can be huge steps in the right direction for providing fairness in the competition.

Whatever the means of achieving the ends, the goal of our competition law shall be to

*"prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India, and for matters connected therewith or incidental thereto."*<sup>112</sup>

## REFERENCES

1. Thoughts On The Business Of Life, <https://www.forbes.com/quotes/4069/>.
2. For the purposes of this article, the author has stated the "big tech" companies to mean the companies in the anti-trust hearings of the US judicial sub-committee (Amazon, Apple, Facebook and Google). There are other big companies like Microsoft as well. However, the author has restricted his analysis to the 4 companies
3. Mario Todino et al., EU Merger Control and Harm
4. to Innovation—A Long Walk to Freedom (from the Chains of Causation), 20(10) ANTITRUST BULLETIN 1, 2 (2018).
5. Tom Relihan, Will regulating big tech stifle innovation?, MIT MGT. SLOAN SCH., (Sept. 27, 2018) <https://mitsloan.mit.edu/ideas-made-to-matter/will-regulating-big-tech-stifle-innovation>.
6. Starting from EUR. COMM'N, Case M.7932, Dow/DuPont, Decision C(2017), [http://ec.europa.eu/competition/mergers/cases/decisions/m7932\\_13668\\_3.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m7932_13668_3.pdf).
7. They can be accessed at: Nicolás Rivero, A cheat sheet to all of the antitrust cases against Big Tech in 2021, QUARTZ (Sept. 21, 2021), <https://qz.com/2066217/a-cheat-sheet-to-all-the-antitrust-cases-against-big-tech-in-2021/>.
8. Mike Sullivan & Richard D. Harroch, *A Guide To Venture Capital Financings For Start-ups*, FORBES (Mar. 29, 2018) <https://www.forbes.com/sites/allbusiness/2018/03/29/a-guide-to-venture-capital-financings-for-startups/#7d66acc51c9c>
9. Hearing by the Subcommittee on Antitrust, Commercial, and Administrative Law, *Field Hearing: Online Platforms and Market Power, Part 5: Competitors in the Digital Economy*, at 00:49:00 (Jan. 17, 2020), <https://judiciary.house.gov/calendar/eventsingle.aspx?EventID=2386>. [Hereinafter Subcommittee Hearing Part 5]
10. Jeremy Levine, partner at the venture capital firm Bessemer Venture Partners AS CITED IN Dana Mattioli and Cara Lombardo, *Amazon Met With Startups About Investing, Then Launched Competing Products*, WALL ST. J. (Jul. 23, 2020), <https://www.wsj.com/articles/amazon-tech-startup-echo-bezos-alexa-investment-fund-11595520249>. [The article was relied on at the Hearing by the Subcommittee on Antitrust, Commercial, and Administrative Law, *Online Platforms and Market Power, Part 6: Examining the Dominance of Amazon, Apple, Facebook, and Google*, (Jul. 29, 2020), <https://judiciary.house.gov/calendar/eventsingle.aspx?EventID=3113> [hereinafter "Sub-Committee Hearing Part 6"].]
11. Sub-committee Hearing Part 6, *supra* note 8, at 2:29:00 and 2:32:00.
12. Ryan Tracy, *Tech Upstarts Say Tech Giants Abuse Market Power to Stifle Competition*, WALL ST. J. (Jan. 17, 2020). See also Sub-committee Hearing Part 6, *supra* note 8, at 2:29:00 and 2:32:00
13. *Id.*
14. Sub-committee Hearing Part 6, *supra* note 8, at 2:26:00
15. Matt Day, *Amazon Emails Show Effort to Weaken Diapers.com Before Buying It*, BLOOMBERG (Jul. 30, 2020), <https://www.bloomberg.com/news/articles/2020-07-29/amazon-emails-show-effort-to-weaken-diapers-com-before-buying-it>. See also Sub-committee Hearing Part 6, *supra* note 8, at 2:11:00.



15. WORLD INTELLECTUAL PROPERTY ORGANIZATION, IP & COMPETITION POLICY, <https://www.wipo.int/ip-competition/en/>.
16. INTERGOVERNMENTAL GROUP OF EXPERTS ON COMPETITION LAW AND POLICY, TRADE AND DEVELOPMENT BOARD, TRADE AND DEVELOPMENT COMMISSION, *Examining the interface between the objectives of competition policy and intellectual property*, ¶1, UNCTAD, TD/B/C.I/CLP/36 (2016), [https://unctad.org/meetings/en/SessionalDocument/s/ciclpd36\\_en.pdf](https://unctad.org/meetings/en/SessionalDocument/s/ciclpd36_en.pdf).
17. Sub-committee Hearing Part 6, *supra* note 8, 5:20:00.
18. Sub-committee Hearing Part 6, *supra* note 8, 5:21:00.
19. ¶1, Williams-Sonoma v. Amazon, Case No. 18-cv-07548, US Dist. Court Northern District of California, <https://www.ipwatchdog.com/wp-content/uploads/2018/12/Williams-Sonoma-complaint.pdf>
20. Sub-committee Hearing Part 6, *supra* note 8, at 2:24:26.
21. *Id.*
22. Judicial Sub-committee on Anti-trust, *Online Platforms and Market Power, Part 3: The Role of Data and Privacy in Competition*, at 2:41:20, <https://www.youtube.com/watch?v=FBF1n6Q5vvY>.
23. 139 S. Ct. 1514.
24. Peat, Marwick, Mitchell & Co. vs. Superior Court, (1988) 200 Cal. App. 3d 272, per Low P.J. in his concurring opinion, <https://law.justia.com/cases/california/court-of-appeal/3d/200/272.html>.
25. Merrill Lynch Pierce, Fenner & Smith Inc., In re, 43 SEC 933 (1968). The origin of the information barriers can be attributed to the judgment with regard to its use by financial intermediaries.
26. H. Nejat Seyhun, *Insider Trading and the Effectiveness of Chinese Walls in Securities Firms*, 4(2) J. L. ECON. POL'Y 369 (2008). [The study uses data of the insider transactions in publicly listed firms from 1975 to 2000. The author based his study on comparing the informational efficiency and He concludes that the barriers are porous and ineffective.]
27. Sub-committee Hearing Part 6, *supra* note 8, 3:03:00.
28. Sub-committee Hearing Part 6, *supra* note 8, 1:52:40.
29. Armaan Patkar & Uday Rai Mehra, *Insider Trading: Building Chinese Walls in India*, NLSIU BUSI. L. REV. 1, 10-18 (2018).
30. <sup>30</sup> Amicus curiae submission in Slade v. Shearson, Hammill & Co., 517 F 2d 398: (1973-74) Fed Sec L Rep (CCH), [94], [329] (SDNY 1974).
31. Standard Oil Company v. United States, 221 U.S. 1 (1911)
32. Andrew Pollack, *Bell System Breakup Opens Era of Great Expectations and Great Concern*, NY TIMES (Jan. 1, 1984) <https://www.nytimes.com/1984/01/01/us/bell-system-breakup-opens-era-of-great-expectations-and-great-concern.html>.
33. Sub-committee Hearing Part 6, *supra* note, 2:40:00
34. Elizabeth Culliford, *Where U.S. presidential candidates stand on breaking up Big Tech*, REUTERS (Jan. 24, 2020), <https://www.reuters.com/article/us-usa-election-tech-factbox/where-us-presidential-candidates-stand-on-breaking-up-big-tech-idUSKBN1ZN16C>.
35. *Id.*
36. *Id.*
37. <sup>3</sup>*Biden signs new order cracking down on Big Tech*, BBC NEWS, (July 9, 2021), <https://www.bbc.com/news/business-57783824>.
38. <sup>3</sup>28 of the Competition Act, 2002.
39. Yahoo Finance, *Scott Galloway discusses breaking up Big Tech*, at 6:00 YOUTUBE (JUL. 31, 2020), [https://www.youtube.com/watch?v=QfMWBD AZsRI&ab\\_channel=YahooFinance](https://www.youtube.com/watch?v=QfMWBD AZsRI&ab_channel=YahooFinance). [Scott Galloway is Prof. of Marketing at NYU Stern School of Business.]
40. *Id.*
41. These break-ups are merely suggestive of the kind of break-ups of companies that might happen. What shall be the exact break-up is something that the author has not delved into as it is a policy consideration after a thorough analysis of the actual market conditions.
42. Kenneth Labich, *Was Breaking up AT&T a Good Idea?*, FORTUNE MAG (Jan.2, 1989) [https://archive.fortune.com/magazines/fortune/fortune\\_archive/1989/01/02/71446/index.htm](https://archive.fortune.com/magazines/fortune/fortune_archive/1989/01/02/71446/index.htm).
43. Yahoo Finance, *supra* note 39.
44. In Re: Alphabet Inc. Case No. 07 of 2020, <https://www.cci.gov.in/sites/default/files/07-of-2020.pdf>.
45. In Re: Together We Fight Society, Case No. 24 of 2021, <https://www.cci.gov.in/sites/default/files/24-of-2021.pdf>.
46. In Re: Flipkart Internet Private Limited and its affiliated entities & others, <https://www.cci.gov.in/sites/default/files/40-of-2019.pdf>.
47. Tim Wu & Stuart A. Thompson, *The Roots of Big Tech Run Disturbingly Deep*, NY TIMES (Jun. 7, 2019) <https://www.nytimes.com/interactive/2019/06/07/opinion/google-facebook-mergers-acquisitions-antitrust.html> [It details all the acquisitions of potential competitors by Google & Facebook graphically] RELIED ON at Hearing by the Subcommittee on Antitrust, Commercial,

- and Administrative Law, *Online Platforms and Market Power, Part 4: Perspectives of the Antitrust Agencies* (Nov. 13, 2019) ["Sub-Committee Hearing No. 4"]
48. Tim Wu & Stuart A. Thompson, *The Roots of Big Tech Run Disturbingly Deep*, NY TIMES (Jun. 7, 2019) <https://www.nytimes.com/interactive/2019/06/07/opinion/google-facebook-mergers-acquisitions-antitrust.html> [It details all the acquisitions of potential competitors by Google & Facebook graphically] RELIED ON at Hearing by the Subcommittee on Antitrust, Commercial, and Administrative Law, *Online Platforms and Market Power, Part 4: Perspectives of the Antitrust Agencies* (Nov. 13, 2019) ["Sub-Committee Hearing No. 4"]
49. It states that from 2009-19, there were over 400 acquisitions by the 5 largest firms and none were blocked and very few had conditions imposed for getting approval. See Report of the Digital Competition Expert Panel, *Unlocking Digital Competition*, chaired by Jason Furman, 12 (Mar. 2019), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/785547/unlocking\\_digital\\_competition\\_furman\\_review\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf). [hereinafter "Furman Report"]
50. Sub-committee Hearing Part 6, *supra* note 8, at 5:49:00.
51. *Id.* at 5:50:00
52. Sub-committee Hearing Part 6, *supra* note 8, at 3:27:00
53. *Id.* at 3:18:00.
54. *Id.* at 2:15:00.
55. *Id.* at 3:52:00.
56. *Id.* at 3:33:00.
57. *Id.* at 3:58:00. It was inviting for their data to the extent of sending their Amazon shopping lists in the name of a "privacy" promoting VPN app.
58. Sub-committee Hearing Part 6, *supra* note 8, at 5:42:00. This was revealed in a TechCrunch investigation and the apps were taken down.
59. Tim Wu & Stuart A. Thompson, *The Roots of Big Tech Run Disturbingly Deep*, NY TIMES (Jun. 7, 2019), <https://www.nytimes.com/interactive/2019/06/07/opinion/google-facebook-mergers-acquisitions-antitrust.html>. [They offer a graphical representation of Google and Facebook's acquisitions.]
60. Stigler Centre for the Study of the Economy & the State, The University of Chicago Booth School of Business, *Committee for the Study of Digital Platforms Market Structure and Antitrust Subcommittee*, 90. [hereinafter "Stigler Report"]
61. Furman Report, *supra* note 48, at ¶3.101.
62. Stigler Report, *supra* note 59, at 79.
63. *Id.* at 90.
64. Press Trust of India, *Staff shortage: Parliamentary panel flags structural issues at SFIO, CCI, BUSI. STD.* (Dec 10, 2019), [https://www.business-standard.com/article/pti-stories/parliamentary-panel-flags-staff-shortage-at-sfio-competition-commission-119121000849\\_1.html](https://www.business-standard.com/article/pti-stories/parliamentary-panel-flags-staff-shortage-at-sfio-competition-commission-119121000849_1.html).
65. Robert Pitofsky, *The Essential Facilities Doctrine Under United States*, 70 ANTITRUST L.J. 443 (2002).
66. *Byars v. Bluff City News Co.*, 609 F.2d at 843, 856 (1979)
67. *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 992 (D.C. Cir. 1977)
68. *Verizon Communications v. Law Offices of Curtis V. Trinko, LLP (Trinko)*, 540 U.S. 398 (2004)
69. *Pacific Bell Telephone Co. v. linkLine Communications, Inc. (linkLine)*, 555 U.S. 438 (2009)
70. *Case C-481/01, IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG*, 2004 O.J. (C3) 16 (April 29, 2004).
71. *NDC Health/IMS Health*, Decision (interim measures) of 3 July 2001 OJ 2002 L 59, 18.
72. *Oscar Bronner GmbH & Co. KG v. Mediaprint Zeitungs-Case C-7/97*, 1998 E.C.R. I-7791, [1999] 4 C.M.L.R.
73. *Id.* ¶¶45-46. [However, it was stated in the judgment that the access must be indispensable and not merely convenient or desirable.]
74. *Id.* ¶38.
75. *Id.* ¶¶45-46.
76. *Id.* ¶41.
77. *Arshiya Rail Infrastructure Limited (ARIL) v. Ministry of Railways*, (2013) 122 CLA 297 (CCI).
78. *Shamsher Kataria v. Honda Siel Cars India Ltd.*, (2014) Comp. L.R. 1 (CCI).
79. It means that the consumers choose a single platform for their social media, search engines, etc. Sebastian Wismer & Arno Rasek, *Market definition in multi-sided markets*, OECD DAF/COMP/WD(2017)33/FINAL, p.9 (Nov. 15, 2017) <http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD%282017%2933/FINAL&docLanguage=En>.
80. Furman Report, *supra* note 48, at 36.
81. David Gray et al., *The Influence of Inertia on Brand Switching Behaviour*, in LOOKING FORWARD, LOOKING BACK: DRAWING ON THE PAST TO SHAPE THE FUTURE OF MARKETING 779 (2015). [They analyse data of 799 mobilephone service customers qualitatively and quantitatively to show the abovementioned outcomes.]
82. Peter Thiel, *Zero to One*, Chapter IV: The Ideology of a Competition, 35 (2014).
83. *Id.*
84. Leo Van Hove, *Metcalfe's Law and Network Quality: An Extension of Zhang et al.*, 31 J. COMP SC. & TECH. 117 (2016).
85. Anotnio Madureira, *Empirical validation of Metcalfe's law: How Internet usage patterns have changed over time*, 25(4) INFO. ECON. & POL'Y 246 (2013).

86. Xing-Zhou Zhang et al., *Tencent and Facebook Data Validate Metcalfe's Law*, 30 J. COMP SC. & TECH. 246 (2015).
87. Jeanne W. Ross et al., *You May Not Need Big Data After All*, HARV. BUSI. REV. (Dec. 2013), <https://hbr.org/2013/12/you-may-not-need-big-data-after-all>.
88. 1.4 of Report of the Competition Law Review Committee, chaired by Injeti Srinivas, at p.149 (Jul. 26, 2019), [http://www.mca.gov.in/Ministry/pdf/ReportCLR\\_C\\_14082019.pdf](http://www.mca.gov.in/Ministry/pdf/ReportCLR_C_14082019.pdf). [hereinafter CLRC Report]
89. David P. Reed, *The Law of the Pack*, HARV. BUSI. REV., Feb. 2001, 23-24 Thus, the value of a GFN increases exponentially, in proportion to  $2^n$ . This is called Reed's Law & its implications are profound.<sup>89</sup>
90. *Id.*
91. It won't be ideal due to the network effects (and the resultant consumer inertia and lethargy) and the data privacy issues arising out of making the data interoperable. Thus, these laws need to be read in conjunction with the data protection laws of the nation. *United States v. Microsoft*,
92. CLRC Report, *supra* note 87, 149-50.
93. Magill case.
94. *United States v. Microsoft Corporation*, 253 F.3d 34 (D.C. Cir. 2001)
95. CLRC Report, *supra* note 87, ¶2.15 at 157.
96. See Frank Schoneveld, *Abuse of IP Rights under China's Antitrust Rules: Recent Cases Have a Potentially Serious Impact*, LEXOLOGY (March 22, 2013), <http://www.lexology.com/library/detail.aspx?g=9f45d667-7444-4a74-ae61-bf4b5d04e0fe>.
97. IP Commission Report, US, 14. [http://www.ipcommission.org/report/IP\\_Commission\\_Report\\_052213.pdf](http://www.ipcommission.org/report/IP_Commission_Report_052213.pdf)
98. *Id.*
99. See e.g. *Interdigital v. Huawei*,
100. Peter K. Yu, *Data Producer's Right and the Protection of Machine-Generated Data*, 93 TULANE L. REV. 859, 927 (2019).
101. *Viaggiare S.r.l. vs Ryanair Ltd*, Court of Milan, Decision of June 4, 2013.
102. Case C-238/05, *Asnef-Equifax, Servicios de Información sobre Solvencia y Crédito, SL, Administración del Estado v. Asociación de Usuarios de Servicios Bancarios (Ausbanc)*, Judgment of the Court of 23 November 2006, Reports of Cases 2006 I-11125, 63.
103. 164 of Case No COMP M.7217 - Facebook/WhatsApp, Commission Decision of 03/10/2014.
104. 45-46, CJUE, Case C-582/14, 19 October 2016.
105. Frank Pasquale, *FTC Hearing: Remedies for Competition Problems in Data Markets - Nov. 7, 2018 - Session 2*, at 43:30, YOUTUBE, (JUL. 10, 2020) [https://www.youtube.com/watch?v=YH9b8jHBu64&ab\\_channel=FTCvideos](https://www.youtube.com/watch?v=YH9b8jHBu64&ab_channel=FTCvideos). [He is a Professor of Law at the University of Maryland and the author of the book, *The Black Box Society: The Secret Algorithms that Control Money and Information.*]
106. Yaniv Benhamou, *Licensing Big Data: a holistic analysis based on a three-step approach*, early draft submitted to JIPITEC, RESEARCHGATE13 (2020).
107. Perry Eising, *What exactly IS an API?*, MEDIUM (Dec. 7, 2017), <https://medium.com/@perrysetgo/what-exactly-is-an-api-69f36968a41f>.
108. Combination Registration No. C-2017/08/523
109. AZB & Partners, *CCI Approves Bayer's Acquisition of Monsanto* (2018). Retrieved 15 September 2020, from <https://www.azbpartners.com/bank/cci-approves-bayers-acquisition-of-monsanto/>
110. AIKS' Views on Bayer-Monsanto Merger, Peoples Democracy. (2020). Retrieved 14 September 2020, from [https://peoplesdemocracy.in/2018/0128\\_pd/aiks%E2%80%99-views-bayer-monsanto-merger](https://peoplesdemocracy.in/2018/0128_pd/aiks%E2%80%99-views-bayer-monsanto-merger)
111. *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973).
112. Preamble, Competition Act, 2002.