The A.I. Perspective on the Contours of Competition Law

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India's legal and regulatory framework for controlling market competition is still in its infancy. Though the Competition Act, 2002 ("Act") encountered significant implementation difficulties, it was able to properly address concerns about Indian demography. However, the confluence of competition law and technology has revealed significant legal gaps. Google and Amazon have made significant efforts to jeopardise fair competitive processes by circumventing India's competition laws and regulations. Technological advancements have enabled the commercialization of Artificial Intelligence (AI) systems. AI has shown the capacity to disrupt markets and also to undermine the basic balance between competition law and its enforcement. Technology not only benefits consumers but also jeopardises their interests by encouraging market forces and thus influencing market competitiveness. The author examines the possible impact of AI on the industry and evaluates current market trends. The article ends by examining the dangers, their implications, and a potential path for addressing the problems presented by AI.

INTRODUCTION: BACKGROUND

People's talent and effort are required for an average pursuit in commercial operations; but, with the introduction of artificial intelligence, people are now able to alter this requirement entirely. Improved accuracy, as well as risk reduction, are two benefits of artificial

intelligence. In the future, artificial intelligence will be capable of delivering impenetrable and inaccessible quantities of correct data, allowing a professional to make choices using AI technologies. The implications of this are that company portfolios may be controlled by choices that are made by Artificial Intelligence Systems (AIS).

ARTIFICIAL INTELLIGENCE: SCOPE & FUTURE

"AI, introduced as a concept in a 1950 paper, got its name during the Dartmouth Conference in 1956.[1]" However, there is no one, universally accepted definition of artificial intelligence. The term "artificial intelligence" is used to refer to a computerised system that exhibits behaviour that is typically associated with intelligence. Others refer to it as "a system that is capable of rationally solving complex problems or taking appropriate action to achieve its goals in real-world situations."[2]

"AI systems have garnered significant appreciation from the international community and even by WIPO (World Intellectual Property Organization)."[3] In reality, nations such as Australia and Canada have implemented artificial intelligence systems in their patent offices to assist them in doing semantic searches as well as collecting, cleaning, and analysing huge datasets. Artificial intelligence had a profound impact on the whole technological ecosystem, opening doors to previously unthinkable possibilities. This is shown by the continuing research and development for the application of artificial intelligence at the macroeconomic level.

DeepMind, a prominent artificial intelligence (AI) research firm, has submitted several worldwide patent applications covering a wide range of fundamental elements of modern-day machine learning. DeepMind is a leading artificial intelligence (AI) research company.

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[1] 'The history of Artificial Intelligence' (*Washington University*, December 2006) <https://courses.cs.washington.edu/courses/csep590/06au/projects/history-ai.pdf > accessed 25 June 2021
[2] Vaishali Advani, 'What is AI work, Types and Future of It?' (*Great Learning*, 11 February 2021) <https://www.mygreatlearning.com/blog/what-is-artificial-intelligence/> accessed 25 June 2021
[3] Press Release, WIPO, WIPO Translate: Republic of Korea is First to Adopt WIPO's "Artificial Intelligence" – Powered Patent Translation Tool, WIPO Press Release PR/2018/818 (May 24, 2018)

These have the potential to be of considerable importance to those involved in the business use of artificial intelligence. Examples of this kind, as well as technical advancements, have shown to us the widespread presence of artificial intelligence in the business sector. Because of their intrinsic potential to disrupt the basic equilibrium between independent market forces, artificial intelligence systems have begun to exert an impact on the competitive market.

THE COMPETITION ACT, 2002

When one reads the Preamble to the Act, as well as its statement of objects and reasons, it is possible to conclude that its primary goals include the elimination of anti-competitive practices, the promotion and nourishment of competitive markets, consumer protection, and effectively ensuring the freedom of trade carried on by various participants in the market, all of which are consistent with the objectives of the Act. Overall, the text of the law not only requires the preservation of free commerce but also elevates the protection of consumer interests to the greatest level of importance possible.

In fact, if the Commission does not adhere to a time-bound timetable and dispose of its cases in a timely manner, its attempts to liberalise the Indian economy to the standards established by the greatest economies of this century would be jeopardised, according to the Commission. Because of this, a lack of clarity in relation to ideas that are not addressed by the Act will result in precarious and unpleasant circumstances of delay in the disposition of cases as a necessary consequence. Because the Act's outlines do not anticipate artificial intelligence having an impact on the market, it is conceivable that matters may not be resolved as quickly as they should be.

It is true that the Act's objective is not only to bring to light activities that have a negative impact on competition but also to foster and maintain competition in the market. Effective enforcement is essential, not only to punish anti-competitive behaviour but also to discourage the continuation of anti-competitive behaviours, according to axiomatic principles. It is the CCI's unavoidable responsibility to guarantee that the circumstances that have the potential

to suffocate fair competition in the market are addressed. Consumers must enjoy the advantages of healthy competition as a result of the CCI's efforts to guarantee that this occurs.[4] So the CCI must address concerns about competition generated by technology advancements, particularly the capacity of artificial intelligence to affect and anticipate the level of consumer demand and supplier supply. Artificial intelligence has the capacity to propose pre-determined behaviour, which may inevitably have an adverse effect on the competitive spirit of the market.

When it comes to dealing with artificial intelligence's influence in the current situation, it will be desirable if the competent authority draughts regulations that establish a clear timetable for the completion of investigations, inquiries, and final disposition of the matters pending before the Commission.[5] Until particular rules for artificial intelligence (AI) are established, the court must work with them to develop ways to prevent anti-competitive behaviour via machine learning and AI processes. Because businesses are primarily incentivized to create cartels, it is the state's responsibility to prevent cartel formation and any price escalation from taking place. Consumers should not be subjected to unjustified repercussions as a result of unfair competitive tactics.[6] Artificial intelligence (AI) is now posing risks to the competitive market, such as consumer infidelity. The Act encapsulates the idea of a free market in a few words. However, the existing competition law system is no longer equipped to properly handle antitrust issues posed by artificial intelligence due to the passage of time.

POTENTIAL THREATS POSED BY A.I. TO COMPETITIVE MARKETS

Technology industries are distinguished from conventional industries by their technological characteristics. To begin with, technological marketplaces are dynamic and change as a result of fast innovation. For organisations attempting to exert market power via dominance, the continuous and fast rate of technological development may be an obstacle.

In certain marketplaces, a firm's market dominance may prove to be transitory. Second,

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[4] *Rajasthan Cylinders & Containers Limited v Union of India* (2018) SCC OnLine SC 1718 (India), para 79
[5] *CCI v SAIL* (2010) 10 SCC 744 (India), para 136
[6] *BSN Joshi & Sons Ltd v Ajoy Mehta* (2009) 3 SCC 458 (India), para 17

business models based on massive data gathering and near-real-time processing allow companies in the digital sector to provide a diverse variety of new and customised services. However, the benefits of technology come with the risk of market dominance by different organisations via innovation. AI is undoubtedly a disruptive invention that presents a challenge to market dominance. Algorithms are shortcuts that people employ to communicate with computers. At its most basic level, an algorithm simply instructs a computer through a "and," "our," or "not" expression on what to do next.

The academic literature suggests four possible scenarios of algorithm-induced collusion:

1. "Messenger, where humans use computers and the IT environment to better execute cartels,

2. Hub and Spoke, where a single algorithm is used to determine the price by numerous users,

3. The Predictable Agent, where pricing algorithms act as predictable agents and continually adjust to each other's prices and market, i.e. algorithm-enhanced conscious parallelism and

4. Digital eye, where AI operating in enhanced market transparency leads to an anti-competitive outcome."

Considering the 2002 Act's obsolescence, it will be very difficult to devise mechanisms to prohibit cooperation amongst self-learning algorithms. This may be one of the most difficult jobs ever undertaken by competitive law enforcement.[7]

The debate over whether to employ competition or antitrust laws to regulate AI is still in its infancy. However, it is unnecessary to stress the importance of Competition Law in the data domain. "Due to the fact that data-driven mergers and acquisitions such as Yahoo-Verizon, Microsoft-LinkedIn, and Facebook-WhatsApp have necessitated proactive attention from

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[7] *Ibid*

competition law enforcement bodies, it is difficult to ignore the potential role of competition law in regulating data collection and processing practices." It is critical to remember that the influence of Big Data extends far beyond digital marketplaces, as shown by the mergers of Bayer, Climate Corp, and Monsanto, demonstrating that data-driven business models may also result in the convergence of businesses from whole unrelated industries.

The commission of European communities in the Google/Doubleclick case investigated the possible harm to competition due to a merger between Google and DoubleClick. "Numerous complainants contended that the combination would effectively reduce competition between Google and DoubleClick. While the various theories of harm advanced by these complainants differ in their details and nuances, they all presuppose that DoubleClick possesses a number of advantages that would enable it to develop into a significant competitor of Google in the market for online ad intermediation and, by extension, in the market for the provision of bundled online ad intermediation in the absence of the merger. Though the panel found the merger lawful, the case clearly highlights the contradiction between competition and technology."[8]

Concerns raised by big data and technology are inextricably linked to AI since AI's decision-making process is reliant on data gathered through the internet. Artificial intelligence has the ability to create algorithmic collusion.

THE CCI'S ORDER AGAINST THE SEARCH ENGINE GIANT

In Re: Matrimony.com Limited and Google LLC[9], "The Indian Competition Commission fined Google for abusing its dominating position in the internet search industry. The informant contended that Google's fundamental business of search and advertising is conducted in a discriminatory way, resulting in damage to advertisers and, ultimately, to

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[8] 'An Examination Of The Google-Doubleclick Merger And The Online Advertising Industry: What Are The Risks For Competition And Privacy?' (*US Government Printing Office*)
<https://www.govinfo.gov/content/pkg/CHRG-110shrg39015/html/CHRG-110shrg39015.htm> accessed 25 June 2021
[9] *In Re: Matrimony.com Limited v Google LLC* (2018) SCC OnLine CCI 1

customers. Additionally, it was alleged that Google creates an unequal playing field by favouring its own services and partners through human manipulation of its search results to the benefit of its vertical partners."

Google was punished by India's Competition Commission for abusing its dominant position in the internet search business. According to the informant, Google's core business of search and advertising is handled in a biassed manner, resulting in harm to advertisers and, eventually, to consumers. Additionally, it was claimed that Google created an uneven playing field by favouring its own services and partners through human manipulation of its search results to promote its vertical partners.

The Commission also highlighted in its finding that, as a result of the internet's exponential development, online marketplaces have acquired the potential to encompass an ever-widening range of commercial activity. The business sector is not seeing the emergence of big internet platforms capable of wielding significant influence over market players. Online market platforms have access to the whole of the internet, including massive amounts of personal data. As a result, they may find themselves in a position to stifle new innovation or degrade customer welfare. "We must acknowledge that the CCI has been able to acknowledge a prominent display of technological advancement in a detrimental manner. Google's search engine results were found to be in contravention of the provisions of Section 4(2)(a)(i) of the Act."

CCI noted in its ruling that Google's search strategy not only elevated its own business to the top of search results but also restricted market access to other verticals. Additionally, it was discovered that Google has an extended chain inside its commercial divisions that directs visitors to its specialised search result page (Google Flight), imposing an unfair burden on consumers of ordinary search services as well.

The CCI has seen a scenario in which an online services platform poses a danger to the competitive sector. Additionally, the development of artificial intelligence (AI) increases the significant possibility of competition principles being broken as a result of AI systems and

internet search engines. The programmed data serves as the lubricant for the AI engine. AI is often pushed forward by massive data processing. The cumulative impact of AI and data may be very difficult, necessitating reflection on the part of legislative and regulatory bodies.

THE EXISTING LACUNAS WITHIN THE COMPETITION POLICY OF INDIA

Essentially, AI presents three distinct regulatory challenges: market foreclosure and associated exclusionary behaviours, new forms of cooperation, and unique methods for effecting price discrimination. Concerns regarding technical sovereignty and economic inequality may potentially arise as a result of AI.

Automation of automated procedures and fast technological advancements have altered the way people connect and engage in communication and commerce. "We may see this by taking a quick glance at how we acquire products and services. This demonstrates a growing dependence on the internet, computers, and other forms of technology. Increased adoption of technology has hastened the high street's relative demise."

The method for enforcing competition assumes the presence of human behaviour, and legal authorities have judged such anti-competitive behaviour, such as bid-rigging. Competition enforcement usually focuses on potential unlawful agreements between rivals, anticompetitive vertical restrictions (such as resale price maintenance), misuse of dominant market position, and mergers with the potential to significantly impair competition. These collusive agreements and anticompetitive behaviour imply human involvement and participation.

However, we are transitioning from a world in which CEOs collude actively in smoke-filled rooms to one in which pricing algorithms constantly monitor and adapt to one another's prices and market data. As a result, collusive agreements amongst CEOs are not required. Individual entities may independently implement their own pricing algorithm, which determines their own price. As a result, anticompetitive intent may not always present. Executive members may be unable to forecast if, when, or for how long the widespread adoption of pricing algorithms would result in increased prices. Not overt collaboration is at

stake here, but more subtle kinds of cooperation.

The Digital Eye is one of the collision types caused by algorithms. Through Digital Eye, rivals may develop and utilise computer algorithms unilaterally to accomplish a goal, such as profit maximisation. The machines, via self-learning and experimentation, are capable of determining autonomously how to maximise profit.

Another example of anti-competitive behaviour occurring without human intervention is when the ability of computer algorithms to process large amounts of data in a very quick and sustained, non-emotional manner ceases to work and undermining the underlying assumptions upon which competition protection has been built thus far. Axiomatically, a market may be rife with price rivalry without any indication of contract or agreement, which is presently regarded as a necessary condition for the formation of a cartel.

In Meyer v. Kalanick[10], "Uber's founder defended himself by claiming that prices set by the algorithm simply followed natural market fluctuations. The fact however was that these fluctuations were not perceived and evaluated by imperfect human senses and brains but by a refined PC algorithm. The decision in Eturas case gives a valuable contribution to the definition of concerted practices in the age of technology.[11] The court noted that the evidence at hand is capable of justifying the existence of concerted practice between the parties." For two reasons, the parties were deemed to have implicitly consented to share anticompetitive conduct. Considering future behaviour and, secondly, the presence of a coincidental relationship between concentration and market behaviour. As a result, members of any entity cannot absolve themselves of their duties and responsibilities on the grounds that the AI system is devoid of human behaviour. It is reasonable to conclude that the employment of AI programmes by different entities implies a tacit acceptance of responsibility on the part of the entities employing AI in instances of collusive behaviour.

These litigations have highlighted the vulnerability of the completion law enforcement

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[10] *Meyer v Kalanick* 291 F Supp 3d 526 (SDNY 2018)

[11] "*Eturas*" *UAB and Others v. Lietuvos Respublikos konkurencijos taryba* Case C-74/14, EU:C:2016:42

mechanism, as well as a few fundamental flaws in the legal structure. These obstacles have the potential to destabilise India's competitive landscape since there is no liability system in place to ensure responsibility for the complicated algorithmic process.

CONCLUSION

The present antitrust system is looking for a solution to the dangers posed by algorithms and artificial intelligence. The big data behemoths may utilise sensitive data to develop sophisticated algorithms and get the desired outcome via implicit competition malpractices. The concise nature of these algorithms is that they do not need human interaction, and therefore the AI systems' computations provide a market impact of profitability. The present competition law system does not properly handle these complex problems. Since a result, it becomes equally critical for lawmakers to anticipate the difficulties presented by AI, as liability fixation becomes very difficult when decisions are made via automated mechanisms that use self-learning and sensitive data and algorithms.

Because algorithms are purpose-built, the number of market competitors, the nature of the competition, and the method by which the algorithm is created all play a significant part in enabling customers to evaluate goods and make an educated decision. However, one possibility for increasing openness and collaboration is to compel companies to publicly publish the data utilised in their algorithms. Another possible approach is for computers to be programmed to disregard commercially sensitive information, which may assist rivals in arriving at competitive pricing. Regardless, one can never account for an aggressive competitor's human character in a non-fluid mark.