

Algorithms and Collusion: Has the CCI got it wrong?

Kluwer Competition Law Blog
February 28, 2019

Basu Chandola (Indian Institute of Corporate Affairs, School of Competition Law and Market Regulation)

Please refer to this post as: Basu Chandola, 'Algorithms and Collusion: Has the CCI got it wrong?', *Kluwer Competition Law Blog*, February 28, 2019, <http://competitionlawblog.kluwercompetitionlaw.com/2019/02/28/algorithms-and-collusion-has-the-cci-got-it-wrong/>

The Competition Commission of India (hereinafter 'Commission') has recently passed an order under Section 26(2) of the Competition Act, 2002 (hereinafter 'Act'), wherein it has held that there exists no prima facie case against drivers of cab aggregator for involvement of cartel activity/conduct through Ola/Uber's platform. In *Samir Agrawal v ANI Technologies Pvt. Ltd*^[1], the Commission has had the opportunity to decide whether the use of the same algorithm by the drivers through the use of a common platform amounts to cartelization under the Act.

Among other allegations, the Informant submitted that the drivers who were attached to Ola/Uber's networks did not function as their employees, but as independent third party service providers. On the basis of this structure, the aggregators were acting as 'Hub' where 'spokes' (competing drivers) who colluded on prices. The informant also submitted that since the drivers were independent contractors, and did not share any agency/employee relationship, they did not function as single economic entity. He alleged that the cooperation between drivers orchestrated by Ola/Uber resulted in 'concerted action' under Section 3(3)(a) read with Section 3(1) of the Act.

The Commission observed that the hub and spoke arrangement referred to exchange of sensitive information between competitors through a third party that facilitated the cartelistic behaviour of such competitors. In order to qualify as a hub and spoke arrangement, it was necessary that the spokes used a third party platform (hub) for exchange of sensitive information, including information on prices which can facilitate price fixing. Thus, the existence of a conspiracy or a collusion to fix prices was essential for the existence of Hub and Spoke arrangement.

The Commission held that the use of algorithmically determined prices by the platform (Ola/Uber) could not be said to be amounting to collusion between the drivers. It was held that a hub-and-spoke cartel would require an agreement between all drivers to set prices through the platform, or an agreement for the platform to coordinate prices between them. Since such an agreement did not exist to delegate this pricing power to the platform/Cab Aggregators, the Commission did not find any violation of Section 3(3)(a) of the Act. The Commission held that the estimation of fare through App was done by the algorithm on the basis of large data sets on the basis of several factors. Thus, the algorithmically determined pricing for different riders was different and that such pricing was not similar to the traditionally understood 'hub and spoke' arrangement. However, this understanding of use of algorithms for collusion may not be most accurate.

Algorithms and Hub and Spoke arrangement

It is well accepted that algorithms can be employed to limit competition through agreements, concerted practices as well as through other subtle means.^[2] It is a high possibility that an algorithm developed for determination of price to increase efficiency and profit may also lead to anti competitive behavior. In existing literature, the possibility of collusion through the use of algorithm has been categorized through the following - first, the computer acting as messenger; second, the hub and spoke arrangement; third, the use of computers as a predictable agent and fourth category is the use of algorithm as digital eye-optimizing performance.^[3] For the present discussion, we will focus solely on the Hub and Spoke arrangement.

A traditional hub-and-spoke cartel is one wherein there is exchange of strategic information between horizontal competitors (spokes) by the means of a common contractual partner active at a different level of the distribution chain (the hub), who often also contributes to stabilizing a cartel.^[4] In an online environment, the hub-and-spoke framework would arise when different competitors use the same algorithm or the same data pool to determine price.^[5] It refers to scenario where multiple parties use a single algorithm for determination of prices. Though a single vertical agreement does not in itself create anti competitive effects or distort the market, the multiplicity of such agreements may give rise to a classic hub-and-spoke arrangement, whereby the developer (as the hub) helps orchestrate industry-wide collusion, leading to higher prices.^[6]

Such an arrangement is observed when the competitors instead of using their own data and algorithms, find it more effective to use a third-party algorithm supplier who may gain access to data, or an understanding of their pricing policy from several suppliers.^[7] The use of common intermediary to determine prices by the use of an algorithm increases the possibility of existence of a hub and spoke like structure.^[8] The intermediary, in such a case, acts a hub and the competitors who have employed the same intermediary act as the spokes.^[9] For there to exist a hub-and-spoke conspiracy, it is necessary that each distributor provides the hub with data and pricing authority, knowing that its rivals are doing the same.^[10] The use of data from rivals to decide upon the price further shows the presence of an understanding between the competitors.^[11]

The CMA has suggested that existing competition law analysis of hub-and-spoke could be sufficient to address competition concerns arising out of such arrangements.^[12]

Cab Aggregators as Hub and spoke

Uber identifies itself as a technology platform that enables users of Uber's mobile applications or websites provided as part of the Services (each, an "Application") to arrange and schedule transportation and/or logistics services with independent third party providers of such services, including independent third party transportation providers and independent third party logistics providers under agreement with Uber or certain of Uber's affiliates.^[13] Similarly, Ola identifies itself as an electronic platform to facilitate aggregation of Vehicles and does not in any manner provide transportation services.^[14] It is thus observed that the cab aggregators identify themselves as technology/ electronic platform which act as intermediaries between taxi riders and passengers through the use of the app. Even the Commission^[15] has accepted that that Ola and Uber are not an association of drivers, rather they act as separate entities from their respective drivers. If the drivers are separate entities, and they are entering into agreements with the aggregators knowing that fellow drivers are also entering into similar agreements with the aggregators, it results in a hub and spoke arrangement. ^[16] In such an arrangement the hub (aggregator) is setting the price which the spokes (drivers) are following. All the drivers will be considered as competitors who fight against each other in the market for radio taxis and the aggregators will be acting as platforms which are coordinating prices between competitors using the data provided by the competitors.^[17]

It must also be considered that the definition of agreement under the Act is very broad and includes within its ambit arrangements as well as understanding or action in concert. Therefore an understanding between all the drivers that the price will be determined by the common agent/ platform can be considered as an agreement.

To conclude, the author likes to state that the behavior of drivers to use a common agent to fix price knowing that other drivers were also using the same, can be considered as anticompetitive under section 3(3)(a). Furthermore, the use of data obtained from rivals to determine price can further strengthen this stance. The Commission has failed to consider the market model of the aggregators and to apply the principles of Competition law to these disruptive innovators. The existing literature on the topic clearly demonstrates how the hub and spoke conspiracy can apply to digital economy which uses algorithms to determine prices. Ignoring the literature and applying traditional principles to the new economy conservatively serves as a very wrong precedent. The Commission should avoid taking such a stance in the future cases and consider the models of business in the new economy and apply the principles of competition law keeping in mind these models.

[1] Case No. 37 of 2018 (CCI)

[2] Ariel Ezrachi and Maurice E. Stucke, 'Artificial Intelligence & Collusion: When Computers Inhibit Competition' 2017 U. Ill. L. Rev. 1775 (2017)

[3] Ibid

[4] Iga Malobecka, 'Hub-and-spoke cartel - how to assess horizontal collusion in disguise?' <<http://www.krytykaprawa.pl/api/files/view/571208.pdf>> Accessed 03 February 2019

[5] Maurice E. Stucke & Ariel Ezrachi, 'Two Artificial Neural Networks Meet in an Online Hub and Change the Future (of Competition, Market Dynamics and Society)' Oxford Legal Studies Research Paper No. 24/2017

[6] Ibid

[7] Competition and Markets Authority, 'Economic working paper on the use of algorithms to facilitate collusion and personalised pricing' <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746353/Algorithms_econ_report.pdf> Accessed 03 February 2019

[8] Peter Georg Picht and Benedikt Freund, 'Competition (law) in the era of algorithms' Max Planck Institute for Innovation and Competition Research Paper No. 18-10

[9] Ariel Ezrachi and Maurice E. Stucke, 'Editorial- Virtual Competition' Journal of European Competition Law & Practice, 2016, Vol. 7, No. 9 Editorial 585

[10] Diego Hernández, 'Drawing the Boundaries Between Hub-and-Spoke Cartels and Vertical Agreements: Lessons

from the United Kingdom and the United States to Chilean Competition Law', in José Rivas (ed), *World Competition Law and Economics Review* (Kluwer Law International 2018, Volume 41 Issue 2)

[11] Jan Blockx, 'Antitrust in digital markets in the EU: policing price bots Paper for the Raadboud Economic Law Conference, 9 June 2017' Raadboud Economic Law Conference 9 June 2017

[12] Competition and Markets Authority, 'Economic working paper on the use of algorithms to facilitate collusion and personalised pricing' <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746353/Algorithms_econ_report.pdf> Accessed 03 February 2019

[13] Uber, 'Terms And Conditions' <<https://www.uber.com/legal/terms/in/>> Accessed 03 February 2019

[14] Ola, 'Terms and Conditions' <https://s3-ap-southeast-1.amazonaws.com/ola-prod-website/tnc_website.pdf> Accessed 03 February

[15] Samir Agrawal v ANI Technologies Pvt. Ltd, Case No. 37 of 2018 (CCI)

[16] Chanakya Basa, 'Does Price Fixing, by App Based On-Demand Taxi Services Pose a Competition Law Concern in India?' <<https://ssrn.com/abstract=3154522>> Accessed 03 February 2019

[17] Julian Nowag, 'The UBER-Cartel? UBER between Labour and Competition Law' Working Paper Series: LundLawCompWP 1/2016