



Competition Law Association

British Group of the
Ligue Internationale du Droit de la Concurrence
(International League for Competition Law)

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Webinar: "Analysing Algorithms: New frontiers in anti-trust"

Date: Thursday 3 June 2021

Speakers: Dr. Kate Brand and Prof. Pinar Akman

Doctor Kate Brand

How algorithms can reduce competition and harm consumers

i. Purpose and scope of the CMA algorithms paper

- Designed to fill a gap, the main potential issues hadn't been set out until now, with its intention to allow for effective intelligence gathering and collaboration.

ii. Consumer harms

a. Personalised pricing

- This becomes a problem with a lack of transparency and alternative providers. Algorithms can be used to exploit consumers in order to better determine what they might be willing to pay for something. Without data, algorithms couldn't function. Recent evidence suggests that advertised pricing is not largely personalised (though note that these things can change quickly). Fierce consumer backlash has followed previous exposures of this behaviour.
- Discounts and promotional offers may be sent to some customers, excluding those which are more likely to pay higher prices. Prices may be personalised by harder to identify means, such as an Uber ride, for which various factors play into the overall cost. Personalised ranking may be used to make more expensive options more prominent, based on personal data and the price sensitivity of customers.

b. Non-price personalisation

- Personalisation can be applied far more widely than prices. Recommendation systems may be used to recommend content to users based on their history or likes. Harmful practices include addictive behaviour and overuse by consumers, which tie into competition through the likelihood of switching, for example. A customer journey through a website may be steered in such a way that benefits the business but harms the consumer due to lack of transparency. Customer reviews and app ratings may be manipulated through personalisation.

c. Algorithmic discrimination

- Systems can be specifically designed to avoid discriminating against particular groups. Geographic targeting may take place through the use of postcodes, which can often result in



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indirect discrimination through exploitation of those with protected characteristics. Ads may be targeted to more lucrative customers, through gender specific advertising, for example.

d. Unfair ranking and design

- Ranking isn't necessarily on the basis of, for example, best rates available to a consumer. Some sites have at least historically based rankings on various factors including commission, which again isn't transparent to the end customer.
- Dark patterns relate to the design of a website which affects the choices consumers will eventually make, more so in favour of the business and includes the likes of a scarcity counter (e.g. 'Only 2 left!').

iii. Competition harms

a. Exclusionary practices

- Algorithmic systems may be used by dominant firms to prevent competitors from challenging their market position. This includes self-referencing, whereby own products are displayed more favourably (Google / Amazon Marketplace). This is likely to become increasingly important as larger platforms move into downstream markets with this potential conflict.
- Changes to algorithms may adversely affect businesses which rely on them. Given their lack of transparency due to business value, it isn't always clear for downstream businesses to determine when a change in algorithm may have affected their customer traffic.
- Data may be used to foreclose or marginalise competitors through identifying customers who may be risk switching, again displaying the value to the data over the algorithm.

b. Algorithmic collusion

- Algorithms can facilitate collusion through the setting of prices between firms, with the potential to raise prices. They may automatically detect and respond to price changes of competitors, rather than via traditional review.
- Hub-and-spoke refers to the use by multiple competitors of the same algorithmic system to set prices, with these decisions being increasingly outsourced to third parties.
- Algorithms can learn to coordinate too through the learning of strategies, leading to higher overall profits for companies and higher prices for customers.
- Whilst there is a great deal of theoretical evidence as to how these practices work, it isn't clear to what extent they're in play in the real world. A study on German petrol stations looked at the



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introduction of pricing algorithms and their effects. It showed that profit was considerably increased through the use of algorithmic pricing, in contrast to those of their competitors who didn't use this method. More empirical research is needed.

c. Ineffective platform oversight

- 'Gatekeepers' determine fair play for their systems through, for example, the use of online reviews. Again, a lack of transparency makes this difficult to track.

iv. Techniques to investigate harms

- Fake personas may be used to develop a data trail, for the use of studying personalisation and how web browsing history creates this.
- 'Citizen Browser' collects the personalised ads visible to users from social media, for use of studying attempted personalisation.

v. The CMA DaTA Unit

- Data Technology and Analytics Unit.
- The unit provides tools (e.g. to assist with the document review process) to make processes more efficient, as well as assisting on cases themselves (e.g. on the Digital Advertising Market Study through the extraction of data sets).

vi. The wider algorithms programme

- Joint work is ongoing with the likes of ICO, Ofcom and the FCA on 'algorithmic processing', providing for the potential development of tools etc. for mutual benefit.

Professor Pinar Akman

The competition law perspective

vii. Direct harm to consumers

- Algorithms are bringing practices within the scope of competition law. Some questions within competition law remain unanswered, with algorithms complicating things. The practices being reviewed seem to be at the boundaries of competition law where it begins to integrate with other areas of regulation. Joint policies and research is needed between authorities to include all manner of professionals.



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- Several theories of harm discussed as part of the CMA paper are already recognised within the competition world. This includes exploitative abuse / horizontal and vertical agreements through unfair pricing and trading conditions, now enhanced through the use of algorithms. Typical conduct in the famous competition cases is business to business, whereby an analysis takes place because of the factual context. Consumers tend to be considered on an indirect basis through determining the effect on consumers / users. Algorithms are prevalent as part of underlying business models meaning they are difficult to deal with due to their different factual context.
- Competition law now needs to function with business design choices in mind, including the likes of terms and conditions. Do the competition law rules that we have apply to final consumer price discrimination (e.g. abuse of dominant position)? The economic models suggest this is something we should consider in terms of final consumers, though the law is ambiguous on violation of Art. 102 by businesses supplying final consumers through price discrimination. Case law hasn't yet provided us with a straight forward response to this. Who is meant by 'consumer'? The average consumer or the vulnerable consumer? The answer to this will determine approach. Some practices may be easier dealt with by the CMA via their consumer protection powers.
- Exclusionary practices would traditionally be included as part of the competition law analysis. Again, questions are raised in terms of application around limits of design choices, disadvantaging rivals via abuse, leveraging market power and tying / bundling. The business model is not a bug, it's a feature. Given this is part of a business model, more complex consideration is required. By their nature, some business models (such as walled-garden ecosystems) are not open to competition. In those cases, regulation may be more appropriate than competition law.
- Hub-and-spoke cartels and tacit collusion again are difficult to determine from an algorithmic collusion perspective due to a lack of clarity through case law. Conflicts of interest as raised above in terms of the supply chain, is a further challenge for consideration.
- The days of segmenting issues as the responsibility of different regulators are over – it is necessary given the current workings of competition for regulators to work together. Continued research is needed in order to provide further clarity on the items discussed.