

**Competition and Consumer Protection Implications of Algorithms, Artificial Intelligence,  
and Predictive Analytics**

*Remarks at Competition and Consumer Protection in the 21<sup>st</sup> Century*

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**Introduction**

Good morning and welcome to the seventh FTC hearing on competition and consumer protection in the 21<sup>st</sup> century. This is an incredibly important series of events, and we have fantastic panelists who have important and interesting things to say. It will help us create a record that will be useful for a long time to come.

Let me start by giving a couple of disclaimers. First, everything I say today in this brief introductory speech will be only my personal remarks, not necessarily the views of the Federal Trade Commission or any Commissioner. I also want to thank Howard Law School for hosting this event—it's a pleasure to be here. The other disclaimer I need to give is that this event is being photographed and webcast. It will be posted to the FTC website, and by participating in this event, you consent to these terms.

I thought I would start by talking briefly about why we are holding hearings on competition and consumer protection in the 21<sup>st</sup> century, and why we are doing a hearing on artificial intelligence. I know Professor Gavil mentioned this yesterday, and I'd like to echo the important educational purpose of these hearings. At the Federal Trade Commission, we are very much in study and learning mode on the issue of decision-making.

Facts are critical; understanding is critical. When you are developing regulatory or enforcement philosophies, it's vital that you have a robust foundation in fact and a robust foundation in theory. As we began the process of putting hearings together and began surveying the antitrust landscape, one of the things that was immediately apparent was that there is a lot of discussion, but no collection of fact, thinking and theory that would enable the development of policy on the foundation that I just mentioned. Recognizing that



of some of our thinking on these topics, in particular on algorithms and collusion.<sup>3</sup> We noted in that paper that consumers have benefited a lot from these technologies, not just because they drive economic growth but because they provide low-priced services, higher quality goods and services, more choices, and innovative new products.

Is this a one-way street and are these technologies only beneficial? Is there a basis for competition policy concern? Clearly, there is. Despite the benefits these technologies can bring to consumers, it is easy to see the possibility that competitive dynamics could be put into play by the use of them. Let me discuss a couple of specific examples. First, is it possible that artificial

If we assume any of these things do occur, we have to ask what we could do about it. Going back to the non-cooperative oligopoly point for a moment, let's assume that it is possible for algorithms independently to determine for each of their firms to pursue a pricing or output strategy that cause prices to rise or output to fall toward a monopoly or cartel-like outcome. But, again by assumption, each algorithm is simply implementing the most rational economic choice for the company using it at any given time. Is our solution for that to require companies to program their algorithms to behave irrationally or to make bad decisions? Is that a logical consequence of antitrust policy? Is it a necessary consequence? I raise that not because I think that is the right outcome or the actual set of choices we would have, but because I want to suggest that it is not enough to identify potential problems. We need to think about possible solutions and the implications of those solutions,