

# Artificial Intelligence, Algorithmic Recommendations and Competition

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## Abstract :

We explore the impact of recommender systems (i.e., algorithms that use personal data to predict tastes and make recommendations to consumers) on market concentration and the intensity of competition. We model consumer preferences in a flexible way that allows for varying degrees of vertical and horizontal product differentiation. The analysis shows that recommender systems produce a significant increase in market concentration with respect to an individual search benchmark. We then analyze the causes and consequences of such an increase. We show that the increase in market concentration is not due to the feedback loop created by the endogeneity of the data, and that it is associated with an increase in the intensity of competition. We discuss the implications of these findings for competition policy.