

Effects of Consumers' and CPs' Heterogeneity on the ISP's Zero-rating Choice

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Abstract

I study zero-rating, a commercial method implemented by Internet service providers (ISP) and excluding particular content providers' (CP) data from end users' monthly data cap. Because end users who face their own monthly data cap can increase their amount of use without additional payment, zero-rating has been accepted and diffused around the world. However, it is said that zero-rating promotes inequality of competition among CPs because it gives advantages only to particular CPs. I analyze ISP's zero-rating choice when there is heterogeneity among CPs and end users. I find that when the difference of CPs' advertising powers becomes large or when the difference of the number of CP's existing customers becomes small, the ISP chooses zero-rating which promotes inequality. And when the difference of consumption among end users becomes large, the ISP chooses inequality zero-rating. In terms of social welfare, I find inequality zero-rating always results in the largest social welfare compared to the other zero-rating program or net neutrality.

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