

Abstract

I study demand for social media services by conducting an experiment where I comprehensively monitor how participants spend their time on digital services. I restrict access to Instagram or YouTube on their mobile phones and investigate how participants substitute their time allocations during and after the restrictions. During the restriction period I observe substitution towards a wide range of alternatives including across product categories and off digital devices and relate these findings to market definition in attention markets. Participants with the Instagram restriction had their average daily Instagram usage decline after the restrictions are lifted. Participants with the YouTube restriction spent more time on applications installed during the restriction period both during and after the restriction period. Motivated by these results, I estimate a discrete-choice model of time usage with inertia and find that inertia explains a large portion of the usage on these applications. I apply the resulting estimates to conduct merger evaluation between prominent social media applications using an Upward Pricing Pressure Test for attention markets. I find that inertia plays an important role in justifying blocking mergers between the largest and smallest applications, indicating that digital addiction issues are important from an antitrust perspective. Overall, my results highlight the usefulness of product unavailability experiments in analysis of mergers between digital goods.