The cost of annoying ads: A field study in an online labor market

Daniel G. Goldstein and Siddharth Suri — Microsoft Research
R. Preston McAfee—Google

In recent years, many traditional psychology, marketing, and economics experiments have been conducted on Amazon's Mechanical Turk service (Paolacci, Chandler & Ipeirotis, 2010; Mason & Suri 2012). Because Mechanical Turk is a bona fide labor market, in which workers, sometimes professionally, do tasks in exchange for payment, it can also be an environment to conduct field experiments relating to labor, wages and revealed preferences (e.g., Toomim et al, 2011; Mason & Watts, 2009; Horton, Rand & Zeckhauser, 2011). Adapting the methodology of Toomim et al., we conducted a field study on Mechanical Turk to estimate the compensating differential of annoying ads, that is, the amount of money needed to pay a person to generate the same number of page views of a website that has annoying ads as they would on a website with benign ads or no ads.

We conducted this field experiment because while publishers know the payment they receive to run annoying ads, little is known about the cost such ads incur due to user abandonment. Whether to run annoying ads is a contested question for online publishers. In our experiment, we advertised a job on Mechanical Turk that consisted of categorizing emails as spam or not spam. Each email appeared on a new page, meaning that classification constituted one pageview. Workers were randomly assigned a pay rate per email classified (which was revealed after the job was accepted to minimize self-selection) and were randomly assigned to do the work with the presence of either no ads, good (non-annoying) ads, or annoying ads in the page margins. No mention was made of the treatments or studying attrition. We tracked how many pageviews workers generated in each condition and constructed labor supply curves. An analysis of the supply curves allowed us to estimate the compensating differential and showed that in this experiment, accepting market rates to run annoying ads would not have offset the abandonment caused by the ads. This is, to our knowledge, the first experimental demonstration that annoying ads can lose money for online publishers.

REFERENCES