December 15, 2017

Professor Silvio Waisbord, Editor-in-Chief Journal of Communication School of Media and Public Affairs George Washington University Washington, DC 20052

Dear Professor Waisbord and the editorial team,

I am writing on behalf of myself and my colleague Aaron Shaw, Assistant Professor of Communication Studies at Northwestern University. We are submitting the attached manuscript, "The Hidden Costs of Requiring Accounts: Quasi-Experimental Evidence from Peer Production," to be considered for publication in the *Journal of Communication*. At the request of your editorial team, we have temporarily changed the title in the submitted materials to, "Is Requiring an Account a Catalyst or a Cost? Quasi-Experimental Evidence from Peer Production," in order to ensure blind review.

Our manuscript engages with two major themes of communication research related to the Internet, information systems, and organizational communication: decreased transaction costs and the decreased identifiability of the individuals communicating. The first theme emerges from theoretical work suggesting that decreased transaction costs of new technology enhance collaboration in technologically-mediated information systems engaged in the production of both public goods like Wikipedia and communal information goods like knowledge-bases within organizations. The second theme emerges from research showing how computer-mediated communication can reduce individuation and identification in ways that lead to non-normative behavior and a host of problems. This second body of work points to stable identifiers (such as user accounts in online communities and networks) as a critical tool for overcoming these problems.

Our work begins with the observation that the requirement to create a stable identifier within a communication system is itself a transaction cost for would-be contributors. Should interactive online communication systems require these identifiers? Communication theory points in opposite directions and real information systems seem divided on the issue as well. For example, despite massive vandalism from users without accounts, Wikipedia refuses to require participants to log in. In contrast, Yelp imposes exactly this requirement on would-be contributors. Is Yelp missing potential quality contributions? How much would Wikipedia benefit from changing its policy? Prior work has neither teased out the theoretical puzzle at the heart of this question nor has it attempted to provide causal evidence of the effect of requiring persistent identities on participation real interactive communication systems.

In our attached manuscript, we elaborate this theoretical puzzle and present an empirical analysis of 136 natural experiments in online communities, each of which instituted a new

requirement that all participants create and log into an account before contributing. Our work uses a massive longitudinal dataset and a quasi-experimental econometric technique called regression discontinuity to estimate the effect within each community. We find causal evidence in support of both the theoretical perspectives described above. As we hypothesize, the requirement to create accounts leads to a small increase in the number of new account registrations and to very large decrease in low quality participation. That said, it leads to a decrease in high quality contributions as well. These results point to a previously untheorized trade-off between the two ways of understanding stable identifiers. Our work should be of interest to scholars of public information goods and peer production in organizational communication and information systems, to "big data" researchers and computational methodologists, as well as to scholars of communication and technology.

We have listed a number of individuals, none of whom have read the paper, who we believe could serve as reviewers for the manuscript in the Manuscript Central online system. Please do not hesitate to contact us if you have any additional questions.

Regards,

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