The censorship measurement study has caught attention from many scholars. Narayanan and Zevenbergen (2015) made a comprehensive assessment on the study.

First, they managed to determine the nature of the study by answering the following questions: "Who are the stakeholders?" (Narayanan & Zevenbergen, 2015, p.9) and "Is Encore human-subjects research?" (Narayanan & Zevenbergen, 2015, p.10). For the former question, Narayanan and Zevenbergen (2015) thought any internet users might participate in the study unconsciously while the research team and government censorship system might record the unconscious access to potentially censored sites (p.9). For the latter question, Narayanan and Zevenbergen (2015) thought the study was not human-subjects on narrow sense because it only used the IP addresses, but it still had impact on Internet users (p.10-11).

Second, they conducted beneficence analysis. The major benefit of the study is to help find the mechanism of censorship, which people should know because they are stakeholders (Narayanan & Zevenbergen, 2015, p.11-12). The major harm of the study is that put unconscious Internet users at risk of access to censored sites, although they might already be at risk because other third-party requests (Narayanan & Zevenbergen, 2015, p.12-14). In the consequentialist framework, the study didn't increase the risk of people a lot but provide valuable information for censorship system, it's a desirable study. However, it was inconsistent with the principle of beneficence, because it didn't minimize the potential risk.

Third, they showed how researchers mitigate harms, i.e., limited test URLs to frequently and usually accessed domains like YouTube, Facebook, Twitter and so on (Narayanan & Zevenbergen, 2015, p.14). They also found the study even didn't require webmasters to "inform your site's visitors about Encore or obtain their consent before collecting measurements" (as cited in Narayanan & Zevenbergen, 2015, p.15).

Finally, they analyzed the legal compliance of the study. Narayanan and Zevenbergen (2015) pointed out that although Encore is legal in U.S., it's almost impossible to avoid violating all censorship law and policies all over the world and thus they still might put people in risk (p.16).

In my view, Encore is a good study in the consequentialist framework because it's true that it didn't increase people's risk a lot, considering the test URLs are limited to frequently censored domains which makes the access less sensitive. However, it violates the principle of respect for persons and respect for law and public interest. It never asked people for consent to participate in the study while putting them at risk. The attempts to access to censored sites are almost certainly to violating some local censorship law or policies. The technical difficulties should not be excuses for not improving the design of the study. In conclusion, I think research team of Encore did good job, but they could do better in ethical problems

## Reference

- **Narayanan, Arvind and Bendert Zevenbergen,** "No Encore for Encore? Ethical Questions for Web-based Censorship Measurement", *Technology Science*, December 15 2015.
- **Burnett, Sam and Nick Feamster,** "Encore: Lightweight Measurement of Web Censorship with Cross-Origin Requests", 2015.