Notes from attending a symposium

Dah Ming Chiu, Dec 10, 2020

I online attended “Symposium on the Web and Internet Policy” (Dec 9, 2020), a 4-hour affair with 7 invited talks; I quit after 6 talks as it passed mid-night local time. I find the talks stimulating, and jot down the following comments on some of the issues. The speakers are a mixture of economists and law academics interested in technology, and technical people interested in the regulation of technology. Among the latter, David Clark from MIT is very well-known, and considered by many as one of the chief architects of the Internet.

The first topic is about the privacy and economics of data. Most of us get “free services” on the internet and in exchange give up data about ourselves. The platforms collect data and become economically very powerful. How should government regulate that? I think this issue is common to both the western world as well as China, where there are huge Internet platforms, such as Google, Facebook, Amazon, and Alibaba, Tencent and Bytedance. One idea is to promote the sharing of data. But how does buyer or seller know how much is a dataset worth, which was posed as a challenging problem. My immediate thought is that data cannot be sold like conventional products, with a set price, or even via auction. It makes more sense to sell via a longer term contract, that can let the realized business value determine the price. Also, data may not be a fixed commodity – it may be continuously measured, and supplied by seller to buyer. Finally, the protection of exclusive use of data seems crucial, which again argues against sale like a conventional good.

Another topic is related to the current pandemic: how do we do contact tracing, and immunity certification as vaccines become available. The speaker posted the challenging problems in terms of privacy and trust. For contact tracing, my thought is there are two types of information: (a) relevant information about the infected; and (b) movement information about the susceptible. I think (a) should be shared to the extent it helps save lives, as it is a social welfare. On the other hand, (b) should not be collected by government and should be kept by people themselves as much as possible. This way, we minimize the invasion of privacy, in combating the virus. During discussion, someone in the audience challenged me about the rights for the infected. I think it is an unavoidable sacrifice we have to make due to the paramount public good – to minimize virus transmission. Regarding certifying immunity, I think it is purely an issue of trust. “Immunity passport” is a good term; since passport is issued by national governments who are trusted. Likewise, any immunity certificate must also be issued by trustable entities, in an economic and reasonable way.

The third topic concerns “Fairness” of online targeted Advertising. The speaker raised a point that I have not thought much about before. He claims that besides product ads, there are also “opportunity” ads, and “influence” ads. Opportunity ads are things like a job opening, certain house for sale or rent, or other similar opportunities. If a platform (e.g. Facebook) targets such opportunity ads to certain

groups, it may amount to discrimination, hence the need for “fairness”. My immediate question is how would we separate opportunity ads from product ads, the line is not always so clear. Some opportunity ads are also nuisance to most of us, while some product ads might be considered opportunity for those who need those products. Nonetheless, the problem seems interesting, and need more thoughts. The issue of “influence” ads is somewhat different, and it mostly concerns politics. Due to the ability to target users, social media (such as Facebook) has the ability to help send a political message to mostly people who are likely to be influenced by the message, thus greatly increasing the ability to influence by the party buying this capability. Such boosted level of influence is considered dangerous (can be abused by “bad” people), so the posted challenge is how to limit this power. What comes to my mind is that in this age of social media, what influence people are exposed to is already highly polarized, often by self-selection, even without influence targeting. On many social media platforms, such as YouTube or ByteDance, you are continuously fed more similar content based on your earlier choice, to keep your eyeball. To ensure a more balanced and healthy exposure, I think the remedy is to require these platforms to mix in, even in a small part, other reasonable and popular viewpoints. How to do this is not immediately clear, but this is an idea for promoting more social welfare (rather than just the user and platform’s interests), just like anti-discrimination regulations.

Then there were some talks on spectrum and Internet regulations, which I did not get much new ideas, maybe because I am already familiar with the issues there. While today’s Internet is mostly supporting “entertainment” type of applications, it is argued the “Smart-X” types of applications will become more prominent uses of the Internet in the future, which I agree, but “Smart-X” may be more localized traffic. Regarding how today’s Internet has changed over time, I feel the most significant development is the move to Cloud computing and CDN. I have written an article in IEEE Internet Computing [1] to make this point, and explain why it is so. The difference is before there were more need for “end-to-end” support, whereas in the Cloud, it is mostly connecting user machines/devices to the cloud services. In other words, the Internet is more used to support “client-to-server” connection, rather than “end-to-end” connection. This change, in my view, has profound implication to the technology of Internet, as well as regulation issues. I had more discussion on this in [1]. In the discussion, some commented that maybe there is need for “cloud neutrality” as in “net neutrality”. My personal feeling is that there should be enough cloud-cloud competition so that this is not much an issue.

Reference

[1] DM Chiu, “Internet Evolution”, IEEE Internet Computing, 21(3):78-81 (2017)