We are probably doomed to Internet consolidation, but we should still try do something.

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The Internet consolidation and centralization trend has progressed steadily since the 1990's, bringing impactful societal and economic consequences. Periodically, technologists wonder whether this is due to some mistake of their part, maybe a failure to standardize key technologies. Not much ever results from these concerns, because centralization is pushed by powerful economic trends.

For many years, Silicon Valley investors have pursued a deliberate strategy of seeking monopolies, which is pushed by. In an open market, the price that any actor can share is limited by competition, and ultimately cost of production. With monopoly power in a niche, they can start charging up to the perceived value of the service for the customers. That company's margins become much bigger. Massive capital injections will help companies gain a large customer base quickly and start benefiting from network effects and economies of scale. If necessary, more capital can buy potential competitors to consolidate market share. In the end, companies that grow and monopolize their niches will provide substantial returns for their investors.

Of course, that strategy only works if companies are addressing an under-served market and drive technical innovations to serve it well. These under-served niches are often the result of lack of standard solutions. For example, the centralization of mail services allowed the big companies to mitigate spam much better than standard solutions. The social networks might not have become so centralized if there was a good way to manage user identities on the Internet. The techno-optimists will try to fight centralization by developing standards for these missing pieces. They hope than that, and open-source software, might allow competitors to emerge and eventually restore competition in the marketplace. But when monopolies are already entrenched, the chances of success are slim.

Network effects and economies of scale are well understood, but monopolies often benefit from massive collection of data about large number of users. This is particularly true in ad-funded markets. Upstart competitors compete against a dominant product perceived as free, a product that is moreover tuned through this vast knowledge of consumers. The dominant player also uses this knowledge of users to get much higher revenues per "personalized ads", while the competitors are left with crumbs. Even in presence of standards, the massive data bases advantage the dominant player. If we want competition, we need standards, but we also need to level the playing field.

Does that mean that all hope is lost, and that this *Workshop on the Centralization in the Internet* is useless? I hope not. We do see movement in many polities to curb the gross excesses of monopoly seeking investors. We also see a growing resistance to surveillance capitalism and the excessive collection of user data. These political forces might eventually level the playing field. If that happens, then of course good standards will help develop a healthy competition. And in any case, developing cool new standards would be fun. So we can just as well identify a list of technologies and start working on them.