Facebook and Google as Regrettable Necessities

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ABSTRACT

The following article considers the results from two different studies, a European one involving over 20,000 respondents and an American one closing on 1,000, to illustrate how online platforms such as Facebook and Google can be defined as regrettable necessities. We define regrettable necessities as those whose consumption provides a direct disutility to consumers. That is, other than the standard utility derived from the access to a given service, a direct disutility in terms of privacy losses and preference manipulation results from their use. In addition, users acknowledge this fact and are aware of the disutility suffered, though not necessarily of its intensity, highlighting the fundamental strategic role played by these platforms in current voting environments.

KEYWORDS

Duopoly, Facebook, Google, Manipulation, Privacy, Regrettable Necessities, Strategic Information Transmission, User Preferences, Voting

1. INTRODUCTION

The capacity of online information providers to manipulate the preferences and decisions of Internet users has recently become a trendy topic given the social emphasis placed on fake news and the increasing interest in big data analysis (Schneier, 2018). This has been the case despite the fact that the Internet was initially considered by its most radical supporters as a free and frictionless information allocation mechanism matching perfectly suppliers with demanders (Columbia, 2016). Its capacity to process enormous amounts of information and freely distribute it across users led the most optimistic of them to expect a virtually perfect exchange of information. However, it was the extraction of information from the users what became one of the main pillars of the resulting online market in such a way that “by the mid-2010s the average reader on news sites like Boston Globe’s bostom.com would be subjected to extraordinary surveillance methods, with only the barest degree of consent” Wu (2016, p. 321).

The online interactions taking place between information providers and Internet users has generated a substantial amount of empirical literature illustrating that “the rankings of search results provided by search engine companies have a dramatic impact on consumer attitudes, preferences, and behavior” (Epstein and Robertson 2015, p. E4512). These biases are seemly due to the trust with which users endow the companies in charge of the search engines to rank the results according to their subjective preferences. This is the case despite the fact that “users generally have no idea how results get ranked” (Epstein and Robertson 2015, p. E4512). The trust placed on an abstract algorithm

DOI: 10.4018/IJSDS.2020010102
– designed and updated by human engineers – applies also to Facebook, despite the decrease in satisfaction levels experienced by its users (Kourothanassis et al., 2015).

One of the main consequences derived from the strategic process of information collection (and transmission) has been the emergence of the Facebook-Google duopoly of information providers, whose dominance over the market is expected to continue increasing.

Google and Facebook are set to attract 84 per cent of global spending on digital advertising, excluding China, in 2017, underscoring concerns that the two technology companies have become a digital duopoly (Garrahan, 2017).

The use of Facebook and Google is so widespread and routinized that the data retrieved from their users is being used to generate increasingly accurate profiles of the population (Schneier, 2014). This fact is generally acknowledged by the users – particularly when dealing with privacy concerns (De Wolf et al., 2017) –, who nevertheless continue to use social network sites and search engines on a regular basis. In evolutionary theory, a routine arises whenever a given behavioral pattern is socially accepted among the population. In the current context, such a definition implies that whenever the use of an online platform becomes widespread and accepted as part of the standard behavior to follow, the costs arising in terms of privacy losses and potential manipulability are accepted and assimilated by the population. That is, users are willing to provide online platforms with the information required on a daily basis despite knowing that it can be exploited in a nontransparent way.

Among the theories proposed to justify such a behavior, the scopophilia approach of David Lyon (2006) has gained considerable momentum. The willingness to compete by displaying private information could be considered one of the main incentives driving users to share preference-related data in exchange for free access to the different products of online platforms. This feature links the behavior of users to the positional competition concept developed by Fred Hirsch (1977), where individuals compete within the social spectrum for increased, though marginal, recognition. Within such a framework, “potential customers are choosing to enter into these quasi-feudal user relationships because of the enormous value they receive from them” (Schneier 2014, p. 60), since the services provided by online platforms constitute “the tools of modern life” they’re necessary to a career and a social life. Opting out isn’t a viable choice for most of us, most of the time; (…) and choosing among providers is not a choice between surveillance or no surveillance, but only a choice of which feudal lords get to spy on you. (Schneier 2014, pp. 60-61).

A similar conceptual path is followed by Ward (2014), who describes how online interactions can lead to situations of social tyranny where the beliefs and interests of a group of virtual community members are imposed on the other members of the community. In this regard, it has also been empirically illustrated that online platforms, namely, search engines (Epstein and Robertson, 2015) and social network sites (Liberini et al., 2018), are able to manipulate the preferences and, therefore, the subsequent behavior of users. Kosinski et al. (2013) utilized the information available online to predict with considerable precision the main psychological attributes of users. Cambridge Analytica applied their findings to generate psychograms of the whole adult population of U.S. citizens, as its CEO boasted.

We’re able to identify clusters of people who care about a particular issue, pro-life or gun rights, and to then create an advert on that issue, and we can nuance the messaging of that advert according to how people see the world, according to their personalities. (Burleigh, 2017)

The direct consequences derived from the strategic use of online platforms have been analyzed by Liberini et al. (2018), who estimated that the political advertising of Facebook increased Trump turnout by almost ten per cent in the elections of 2016. Moreover, Epstein and Robertson (2015) illustrated empirically the capacity of online information providers to manipulate the preferences of users in voting environments. A fundamental implication that follows from the ability of suppliers to manipulate information is the fact that users do not generally acknowledge the severity of the effects that may arise from any potential manipulation of their preferences and choices.
An Entropy-based Mathematical Formulation for Straight Assembly Line Balancing Problem
