Identifying Resistances to Online Advertising

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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1. Introduction

Over the last century, advertisement has developed into a complex and nuanced aspect of commerce that is worthy of its own field of study. From newspapers and town criers to radio and television ads, advertising has developed alongside media technologies. Online advertising is now racing forward at an unprecedented pace, from 1% of all advertising in 1999 to 20% in 2013 (Goldfarb and Tremblay, 2014). Internet advertising opens a host of additional options that previous iterations of advertisement did not have available to them through the potential of user data, sometimes collecting user data for this purpose with relatively extreme methods (Demetriou Soteris, 2016). Many tech companies produce free products which they monetize through advertising, and in order to gain a competitive advantage in that field they collect as much information about the user as possible (Curran 2018).

However, internet advertising restrictions have increased in recent years as attempts to regulate advertising and the usage of user data have increased. There are two major pieces of legislation that intend to limit internet advertising and protect consumers: The European Union's General Data Protection Regulation (GDPR) (Intersoft, 2019), and the California Consumer Protection Act (CCPA) (State of California, 2021). By analyzing these pieces of new legislation as a case study, the principles of the framework of technopolitics can be applied to show how our society is adapting to internet advertising and what the future might hold, for both the industry and the consumer.

2. Techno-politics

In our increasingly digital society, it becomes increasingly difficult to consider technology and politics independently. Any new legislation is likely to have far reaching implications for some field of technology, and each new technology is likely to have significant impacts on society. The framework of technopolitics can be broadly described as "[the study of how] science and technology 'constitute, embody, or enact political goals'" (Foley and Miller, 2020). This framework can be used to understand the interplay between innovation and civilization by focusing on some of the ideological conflicts that apply broadly to both politics and society.

One example of technopolitical entwinement in recent years is the Cambridge-Analytica scandal. In 2016, the growing influence of social media and its abundance of personal information were used in an attempt to interfere with United States elections (Feiner and Graham, 2020). The corporation Facebook was used as a vehicle by foreign governments attempting to interfere in the 2016 presidential election. Later investigations into this and other election interference attempts sparked a variety of new proposed legislation that would restrict the ability to anonymously buy political advertisements, create limitations on collecting and selling user data, and so on. In this way new technologies of social media and internet advertising played a role in politics and were then, in reaction, constrained themselves. Though in this particular case many of the proposed reactions were defeated on political lines by those incentivized to allow such interactions to continue in the future.

There is a particular struggle that is key to many technopolitical discussions, especially those pertaining to the internet: the struggle between the ideals of free speech, and secrecy and surveillance (Kurban, Peña-López, & Haberer, 2017). This can be seen in the previous example, where the right of anyone to say (advertise) what they wish without restriction conflicts with the desires for transparency, or in other words surveillance as to who is behind that speech and its funding. This conflict is particularly prevalent in the United States, which attaches particular importance to both sides of the issue. The ideal of free speech is codified in the first ammendment of the American constitution and dates back to the revolution.The focus on secrecy and surveillance is much more recent on the other hand, largely developing in the wake of the 9/11 terror attacks.

3. Technopolitics and Internet Advertising

This paper examines the ongoing interaction of government and technology on the stage of the internet, analyzing the current position and likely future of the struggle between freedom and surveillance. The idea that users have a right to their own data is relatively new, and attempts to protect this right are newer still. By considering what areas are covered, and to what extent, the current scope and intensity of the impact of politics on the technology can be observed, and through this the balance of freedom versus surveillance and security.

It is particularly interesting to note that the sides of freedom of speech and secrecy and surveillance are not always clear. Is it freedom of speech or secrecy to desire anonymity online? While this is not entirely clear, this paper will take the interpretation that the consumer who wishes to use services without surrendering personal information stands on the side of free speech, and the company that wishes to surveil its users for additional profit stands on the side of surveillance. However, this distinction is far from clear and might serve as an excellent topic for future discussion.

4. Current Status

The current state of advertising is extremely chaotic and ill-organized. Large advertising companies are responsible for any level of standardization that does exist (Boddewyn, 1989). Furthermore, legislation and control are scarce at best, as mentioned in the introduction and Legislative Review on Advertising section. This leads to the overall picture of current advertising: a greatly expanded domain that is struggling to adapt to the new technologies and opportunities opened up by the advent and popularization of the internet. In this section I will provide a brief overview of the aforementioned history, challenges, opportunities and some takeaways therefrom.

The last century has brought major changes to nearly all aspects of life, among the most significant of which was the development of computers. Of particular interest to the realm of advertising is digital media, which transformed the traditional method of creating generic advertisements that would reach broad audiences into the myriad of approaches seen today (Taylor 2009). However, it is worth at least briefly acknowledging the history of advertisement, and its notable forms:

- Newspaper style print advertisements
- Radio advertisements
- Television ad breaks
- Television infomercials
- Celebrity endorsements
- Product placement in media such as movies
- Coupons and Sales

The consumer's view of advertisements in the current state can be described as adversarial, with customers feeling predominantly negatively (Hsu, 2019). This is not, however, a hard and fast rule. Although most people would not initially recall an advertisement that they enjoyed or appreciated, there are some obvious examples. Even among traditional advertisements, the American Super Bowl has a history of high effort and well received advertisements. Surveys cite that as much as 30% of the audience consider the ads a major motivation for watching the Superbowl (Sakal, 2021). This shows that traditional media advertisements can be enjoyable to the target audience if the advertisement creators put the time and resources into production. However, effort is scarce for the most ubiquitous ads on the internet, such as pop-ups, prerolls (ads that play before videos) and banner ads (Lazuaskas, 2021). However, even low effort advertisements can be appealing to audiences, if they have something to offer.

In the era of Amazon and online retail, coupons and sales are more important to consumers than ever. 80% of survey respondents indicate that they are encouraged to make first time purchases with a brand when they find an offer or discount (Roesler, 2021). Various other statistics from the above source heavily reinforce the idea that consumers in general, but especially younger generations put an incredible amount of emphasis on deals and coupons, which form an integral part of online shopping. Older generations experienced a similar trend, though less exaggerated, with physical coupons and brick and mortar stores. Clearly, using coupons and sales in advertising is an effective direction that even cheap, low effort ads can take to appeal to consumers who would otherwise be irritated by their existence.

On the other hand, more technical solutions are also available: Systems that can learn from user data to improve advertising experiences and outcomes allow advertisers to reach for

varied goals, from immediate results to long term customer satisfaction (Zhao et al. 2020). Additionally, this step towards technological processes works well because the inputs are flexible, allowing new technologies like this one to adapt to legislation or other new feedback (Yun, Segijn, Pearson, Malthouse, Konstan, & Shankar, 2020) by simply adjusting the information that is input to the model, rather than overhauling the entire system. This ability to quickly adapt to new legislation is going to be one of the most important traits a system can have going forward. It lends itself well to open-ended machine learning models that can train on a variety of data such as the one proposed in Jointly Learning to Recommend and Advertise (Zhao et. al. 2020).

Another major concern for advertisers going forward is the ongoing conflict with consumers. Ad-blockers are a relatively new concept that has developed with the rise of the "free with ads" model for websites and other online content, but they are a growing concern for internet advertisers. While the current level of usage is still relatively low, ad blockers have steadily gained in popularity in recent years. They are 2-3 times more popular among young users (Zhao, Wang, Kalra, Vaks, Borcea, & Chen, 2017), signs that point to this as a growing concern for advertising going forward. There are 2 main approaches that can be taken towards ad-blockers, and other ad avoidance practices in general: either advertisers can engage in a technological arms race by developing anti-ad blocker tools and their analogues for other mediums and methods of avoidance, or they can seek to make ads more desirable to prevent users from ever trying to avoid them.

All this sets the backdrop for the passage of the two pieces of legislation we will be examining. With an increasing gap between the expectations of the user and the advertising company, more and more user data is being farmed and sold, and the general public are

beginning to notice. From this current state of affairs I will extract the few largest and most relevant groups of stakeholders in the next section for the eventual analysis.

5. Stakeholders

From the previous section, I identified a few major groups of stakeholders that can be considered in the analysis of legislation. The first category is the general public, the sources of personal information. The second group are the harvesters, companies who often have free software or who sell advertisements and collect user data, often in large quantities and without the user understanding their actions. The third group is the advertisers, who buy user data and incentivise the harvesters to increase their patterns of information gathering to push more targeted advertisements. The final group considered is the policy makers, the governmental group that is elected by the general public and funded by the harvesters and the advertisers.

The first group, the general public, is the least homogenous group of the 4. There is very little cohesion among them, but there do tend to be a few trends that hold true. The general business model of many providers internet media now works without exchanging funds at all: the user provides their attention (sometimes enhanced by their personal information) in exchange for a nominally free piece of media or service, such as music, a news article, or a search engine (Anderson & Jullien, 2015). Here the customer wants to minimize the disruption caused by the pseudo-sale of their attention and data, which is accomplished to varying degrees (based on the intrusiveness and disruption of the ads).

Opposing the general public are the advertisers, who are the ones that provide the funds to support the services that the general public is enjoying for free or at reduced cost. Their main interest lies in maximizing the user's attention and concentrating on the most beneficial groups.

This leads them to provide financial incentives for the advertisers to increase the quantity of advertisements and to expand their collection of personal information from the general public.

The remaining 2 groups of stakeholders are similar, both primarily serving as intermediaries for the previous two groups. The harvesters are companies that collect user information and sell advertisements to the advertisers, but also provide cheap/free services to the general public. They must balance the monetary support from their advertisers with the happiness of the general public to maintain a successful ad supported business model. The government is much the same. They want to promote a thriving internet, so they want to support the businesses, but they are beholden to the general public so must support them and defend their rights.

6. Legislative Analysis

6.1 Overview

There are two key pieces of legislation that are important for this topic: EU's GDPR (Intersoft, 2019) and the CCPA (State of California, 2020). Both are primarily interested in protecting rights that internet users perhaps took for granted before the advent of the internet and big tech. For our analysis, we will focus on the CCPA, the weaker and newer of the two, and use the GDPR as contrast. The CCPA lays out 4 main rights here as the core:

- The right to know what information is being collected and how it will be used and shared -
- The right to delete personal information that has been collected (with certain exceptions) -
- The right to opt-out of sale of personal information
- The right to non-discrimination for exercising the above rights

This serves as an excellent summary of California's concerns about protecting consumers from online advertising. The GDPR covers more or less everything the CCPA does, but it is more restrictive towards companies: The CCPA only applies to California residents, and operates on an opt-out system rather than an opt-in system (Miratech Holdings, 2019).

6.2 CCPA

The CCPA is an important first step in recognizing and protecting the rights of the general public, but the four rights that it lays out fail to cover all of the damaging effects of the current system. It takes a clear stance towards protection of the free speech of the consumer and against surveillance, but both the steps and the scope are limited, preventing a greater impact. The strongest of the 4 rights is the ability to opt out of the sale of personal information, but it is an opt-out system, which is inherently weaker than an opt-in version. Opt-out systems require

user knowledge and action to prevent harm, whereas opt-in systems require user acknowledgement to allow the risk of harm. Thus the default state for opt-out is that of risk whereas the default of opt-in is that of safety. This shows the resistance present to a hard line protection of the general public, alternately interpreted as fears of what a stronger stance could cost. Some initial estimates indicate that just direct initial compliance could cost internet companies over ten billion dollars by 2030 to reach compliance (McDevitt & McDevitt, 2020). These costs run the risk of damaging existing business and inhibiting future growth, striking a delicate balance with identifying and protecting the new rights created by the digital era.

There are two other main rights besides the right to opt out discussed above, though neither of them helps to prevent the collection of data directly. The first right outlined by the CCPA involves the consumer's right to know what data is being collected and how that data will be used, though it in no way directly stops that collection. This is similar to the second right, which is colloquially referred to as the right to be forgotten, which demands that users be able to remove data collected about them in reasonable circumstances. Each of these sections brings a powerful new addition to the rights of a Californian internet user, but following in the theme of opt-out collection from earlier, they are relatively weak. Their greatest shortcoming is that these rights must be first discovered and understood, then sought out and actively used by the general public to cause any deviation from the current status quo. Many members of the general public lack this knowledge and would be unable to put it to use even if they did know they had these rights, reducing the effect of these protections.

The final right of the CCPA is related to the exercise of the previous rights: citizens who exercise their CCPA granted rights and abilities are to be protected from discrimintation. This is perhaps the strongest of the above rights, given that without it unscrupulous companies would be

fully capable of providing crippled or nonfunctional versions of their products and content for those who know and exercise their rights. This in turn could lead to the development of a "freemium" style model based on the accessibility of user data, with a class of free users denied even the standard free experience for their refusal to divulge their personal information. This kind of strategy, where the nominal free option is so bad as to be virtually unusable, has already been pioneered in other industries like mobile gaming (Kimppa, Heimo, & Harviainen, 2016).

6.3 GDPR and Differences

The GDPR involves many of the same concepts as the CCPA, but the GDPR is not just the EU version of California's new data privacy law. The biggest difference is that of scope: The GDPR aims to be a true omnibus data privacy law, whereas the CCPA is much more limited and focused (Voss, 2021). For instance, the CCPA has several clearly defined exceptions to the size of business and types of information effected, where the GDPR does not. Furthermore, the CCPA is also only applicable to California residents, whereas the GDPR extends to anyone in the European Economic Area. The CCPA is more of an initial step when compared to the sweeping reform of the GDPR. The GDPR also details more requirements for businesses and enforces them more harshly. This last point leads into the second and potentially more important distinction: government sentiment.

The European Union is significantly more interested in enforcing the GDPR than California is in enforcing the CCPA. Only a few years old, there are already various attempts to weaken the CCPA and prevent it's full execution, something that has been minimal though not entirely absent for the GDPR. This internal governmental division in California, along with the weaker overall piece of legislation, shows the key difference between the EU and the US. The

US simply lacks the motivation to create or enforce stringent consumer data protections, even in states that are relatively aligned with such interests, whereas the EU is showing real commitment on the issue.

7. Going Forward

In light of the above analysis, I would assert that the US is allowing secrecy and surveillance to win out in the realm of consumer data protection, whereas the EU is valuing freedom more. This techno political divide is relatively in line with other political issues of recent years, and it paints an interesting picture moving forwards. With the US valuing the profits of corporations over the rights of its citizens, the likelihood of future protections that significantly harm the online advertising industry seems slim. The EU on the other hand seems willing to fight advertisers and tech companies. This could cause a growing rift across the Atlantic, with companies deciding to run multiple versions of their websites to comply with the different regulations. Alternately,the most generous protections could become ubiquitous to avoid the overhead of multiple independent websites, data storage systems, etc.

In the past few months, a conflict of this nature has been brewing between Meta, the company that owns facebook, and EU regulators. Meta wants to process their data in the US, but the GDPR prohibits the transfer of that data outside of the EU, where the GDPR loses its teeth. During negotiations Meta has threatened to leave the EU if a compromise is not reached, though it is generally considered unlikely that this incident will spark such a major response (Nix, 2022). However, this incident is already pointing towards future conflicts that may arise between advertisers, those that monetize user data, and the EU, a problem that is much less likely to occur in the US.

8. Conclusion

In the ongoing evolution of the internet, regulations often fall behind the development of technologies and techniques. The effort to regulate usage of consumer data and internet advertising is a relatively new one, and different perspectives lead to different handling of these topics. In the United States, an emphasis on business and a lack of governmental unity may lead to a continued laissez faire approach, whereas the EU's emphasis on personal rights and freedoms may cause significant conflict as they improve and enforce the GDPR and future bills.

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