

MARKET STRUCTURE, INSTITUTIONAL, AND PRIVACY ANALYSIS OF AD TECH ECOSYSTEMS - A CASE STUDY OF INDIA

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Abstract

This paper investigates the ad tech ecosystem in India. The ad tech sector has changed the advertising industry by offering customers personalised advertising using digital tools, platforms, and practices. However, it has also caused difficulties, such as worries about exclusivity and privacy. This paper uses a case study of India to explore the concentration of market power, institutional principles and norms, and personal data protection rules in the ad tech business. The study's findings indicate that the dominance of significant firms such as Google and Facebook can result in anticompetitive behaviour and limit customer choice, highlighting the significance of market structure theory. The institutional theory demonstrates that societal norms and values, such as privacy and data security, impact the behaviour and practises of ad tech businesses. Meanwhile, privacy theory emphasises the necessity to safeguard the privacy and autonomy of individuals, particularly in the acquisition, processing, and dissemination of personal data for advertising reasons. Introduction

Keywords: *AdTech; Ad Tech Ecosystems, Market Structure*

1. Introduction

Advertising technology (ad tech) is a complex ecosystem of digital tools, platforms, and practices that enables the delivery of tailored advertising to consumers over several channels, including social media, search engines, and mobile devices and websites. Ad tech has revolutionised the advertising business by enabling marketers to target particular demographics and assess the effectiveness of campaigns with unprecedented accuracy. However, expanding ad tech has also created privacy, exclusivity, and moral problems. This study will use market structure, institutional, and privacy theory to evaluate the ad tech industry. Using these ideas, we will also investigate ad tech ecosystems' exclusivity and privacy problems, focusing on a case study of India.

2. Market Structure Theory

The theory of market structure is concerned with the form of competition in a market, including the number and size of businesses, the level of product differentiation, and the degree of entry barriers. Market structure theory may be used to study the concentration of market power among a limited number of prominent firms in the ad tech industry, such as Google, Facebook, and Amazon. Concerns regarding competition, innovation, and consumer welfare have been raised due to these companies' dominance in digital advertising (Chen et al., 2019).

In India, Google and Facebook dominate the ad tech business, controlling over 80% of the digital advertising income (Dutta, 2021). This concentration of market power has resulted in accusations of anticompetitive conduct, such as the preferential treatment of their products and services and the exclusion of more minor market participants (Arora, 2021). According to market structure, such conduct can undermine competition, impede innovation, and restrict customer choice.

3. The Institutional Theory

The institutional theory examines how societal norms, values, and beliefs influence organisational behaviour and practises. Institutional theory may be applied to the ad tech business to evaluate the norms and values that support behaviours such as gathering and using personal data for advertising purposes. Institutional theory may also assist in explaining the formation of industry self-regulation and standards, such as the Transparency and Consent Framework (TCF) for data protection created by the Interactive Advertising Bureau (IAB).

Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 oversee the ad tech business in India and require digital intermediaries, including ad tech companies, to comply with numerous content moderation and user privacy duties (Ministry of Electronics and Information Technology, 2021). These regulations represent Indian society's institutional principles and norms, such as protecting the privacy and preventing online damage. The institutional theory posits that such norms and regulations may influence the conduct and practises of ad tech businesses and increase their societal legitimacy and acceptance.

4. Privacy Concepts

Privacy theory is concerned with preventing unwanted access, use, and disclosure of personally identifiable information. Privacy theory may be employed in the ad tech industry to study the gathering, processing, and sharing of personal data for advertising purposes and the repercussions of such activities on individual privacy and autonomy. Moreover, privacy theory may aid in identifying the legislative frameworks and ethical norms governing the use of personal data in advertising.

The Personal Data Protection Bill 2019, which aims to build an all-encompassing data protection framework for India, regulates the use of personal data for advertising in India (Ministry of Electronics and Information Technology, 2019). The measure has provisions reflecting the privacy theory concepts of data reduction, purpose limitation, consent, and accountability. Unfortunately, the bill has not yet been approved, and the Indian ad tech industry continues to operate under a mix of sector-specific and general privacy rules (Sharma et al., 2021).

5. Issues about Exclusivity and Privacy in Ad tech Ecosystems

In the ad tech industry, exclusivity and privacy concerns are the major challenges. Exclusiveness refers to the ability of major market participants to exclude lesser competitors, reducing competition and innovation. Privacy issues apply to the gathering, processing, and disseminating of personal data for advertising reasons, which can compromise the privacy and autonomy of individuals. Using the three theoretical frameworks stated above, one may assess exclusivity and privacy problems.

Concerns regarding exclusivity in the ad tech industry may be studied using market structure theory, which implies that the concentration of market power among dominant firms can result in anticompetitive behaviour, such as excluding lesser competitors from the market. In India, the dominance of Google and Facebook in the digital advertising sector has prompted worries over their capacity to reject smaller competitors and restrict competition (Arora, 2021).

Privacy problems in the ad tech industry may be studied using privacy theory, which implies that the gathering, processing, and sharing of personal data for advertising purposes may violate the privacy and autonomy of the individual. For example, the ad tech business in India collects enormous quantities of users' personal information, such as their browsing history, search queries, and location data. It utilises this information to offer customised advertising. However, concerns have been expressed over the privacy and security of personal data due to the lack of comprehensive data protection regulations and the lax implementation of current rules (Sharma et al., 2021).

Institutional theory may likewise be utilised to assess privacy problems in the ad tech industry by evaluating the norms and values behind the business's operations. For example,

establishing industry self-regulation and standards, such as the IAB's TCF, reflects the industry's institutional principles and practises, such as respecting user privacy and providing openness in data collection and usage. However, such self-regulation could be more effective due to the absence of enforcement measures and the conflicts of interest among sector participants (Chen et al., 2019).

6. Case Analysis: India

With an expected value of \$3.5 billion in 2020, India is one of the fastest-growing digital advertising marketplaces in the world (Dutta, 2021). As previously mentioned, expanding the ad tech industry in India has prompted issues about exclusivity and privacy. Using the aforementioned theoretical frameworks, we will explore the exclusiveness and privacy problems in the Indian ad tech industry in this part.

6.1 Market Structure Theory

According to market structure theory, Google and Facebook's dominance in the Indian digital advertising industry might result in anticompetitive behaviour and impede competition and innovation. Their dominance was mirrored in the fact that by 2020, these two companies controlled 80% of all digital advertising income (Dutta, 2021). The Indian government has taken several measures to address this problem, including an ongoing antitrust inquiry into Google's suspected misuse of market dominance in digital advertising (Reuters, 2021). However, the efficiency of these strategies has yet to be determined.

6.2 The Institutional Theory

The institutional theory implies that the norms and values of Indian society might influence the conduct and practises of ad tech firms in the nation. The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 embody Indian society's institutional principles and standards, such as preserving privacy and preventing online damage. These regulations mandate that digital intermediaries, such as ad tech businesses, comply with certain content moderation and user privacy duties (Ministry of Electronics and Information Technology, 2021). Nevertheless, the application and enforcement of these standards are still changing, and their efficacy in resolving concerns around exclusivity and privacy in the ad tech ecosystem has to be determined.

6.3 Privacy Concepts

The philosophy of privacy indicates that collecting, processing, and sharing personal data for advertising can compromise individuals' privacy and autonomy. The ad tech business in India collects enormous quantities of users' personal information, such as their browsing history, search queries, and location data. It utilises this information to offer customised advertising. However, concerns have been expressed over the privacy and security of personal data due to the lack of comprehensive data protection regulations and the lax implementation of current rules. The Personal Data Protection Bill 2019, which the Indian parliament is considering, aims to solve these issues by establishing comprehensive data protection and privacy legislation (Mishra, 2020). However, the law has been criticised for its possible influence on innovation and the digital economy, and its ultimate shape remains unknown.

7. Conclusion

The ad tech industry is a complicated ecosystem comprised of advertisers, publishers, and technology firms. This ecosystem's issues on exclusivity and privacy may be evaluated utilising market structure theory, institutional theory, and privacy theory. In India, the dominance of Google and Facebook in the digital advertising sector has prompted worries over their capacity to reject smaller competitors and restrict competition. Concerns concerning the privacy and security of personal data have also been highlighted in light of the absence of comprehensive data protection regulations and insufficient enforcement mechanisms. While the Indian government has

made moves to address these issues, it remains to be seen how successful these policies will be. The continued growth of the ad tech ecosystem and the regulatory environment will continue to determine the industry's future in India and worldwide.

8. References

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