

From Disruption to Adaptation: Ad-Blockers and Their Influence on Global Digital Marketing

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Abstract

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This article examines the growing influence of ad-blockers on global digital marketing, asking how their widespread adoption reshapes consumer behavior, advertising models, and industry responses. The role of this study is to synthesize fragmented research from marketing, information systems, and consumer behavior through a systematic literature review. The results reveal that ad-blocker adoption is primarily driven by consumer concerns over intrusiveness, privacy, and browsing performance, with empirical studies showing both negative effects on advertising revenue and positive effects on perceptions of content quality. The discussion highlights the ways in which publishers and advertisers adapt, including the use of acceptable ads frameworks, contextual and native advertising, and subscription models. The main finding is that ad-blockers act as both a disruption and a catalyst for innovation, compelling the digital marketing ecosystem to prioritize fairness, transparency, and consumer trust in order to remain sustainable.

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1. Introduction

Ad-blockers have evolved from a niche privacy tool into a mainstream consumer technology that significantly reshapes the economics of digital marketing. Their adoption is driven by multiple factors—concerns about online tracking, perceived ad intrusiveness, page-load delays, and security risks—which motivate users to filter advertisements and trackers at the browser or network level. Empirical studies show that blocking affects both the quantity and quality of user–site interactions, influencing metrics such as page views, session length, and latency, with downstream implications for attribution and revenue models that depend on impressions and cookies (Miroglio et al., 2018; Mathur et al., 2018).

One stream of research investigates who adopts ad-blockers and why. Survey and behavioral studies suggest that adoption is influenced by knowledge of blocking tools, attitudes toward online advertising, and perceptions of irritation and clutter (Redondo & Aznar, 2018). Security and privacy literature also indicates that ad-blocking reduces tracking exposure without harming consumer welfare in the short term, suggesting that users exchange ad exposure for performance and privacy benefits (Friik et al., 2020). These insights highlight that adoption is not only a functional choice but also a value-laden response to digital advertising practices.

Another stream examines platform and publisher outcomes. Large-scale web analyses demonstrate that ad-blocking improves page performance while reducing ad call execution, thereby disrupting advertising inventory and third-party measurement pipelines (Miroglio et al., 2018). However, evidence from the news industry suggests that the ad-blocking experience can sometimes increase

consumers' perceptions of site quality and encourage repeat visits, showing that its effects are heterogeneous across contexts (Yan et al., 2022). These findings suggest that the impact of ad-blocking is not uniformly negative and depends heavily on ad quality, page design, and privacy salience.

Finally, studies emphasize industry adaptation. Browser-level interventions, such as acceptable ads programs, and publisher strategies, such as simplified layouts, first-party data models, and subscription offers, reflect attempts to balance monetization with user preferences (Mathur et al., 2018). Technical analyses of blocking lists further reveal which advertising practices are most likely to trigger defensive tools, providing practical guidance for marketers seeking to design less intrusive campaigns.

Against this backdrop, a systematic literature review is warranted to integrate fragmented evidence across marketing, information systems, and security. Such a review can clarify what drives ad-blocker adoption, how blocking affects consumer behavior and monetization, and which adaptation strategies are effective. Synthesizing these insights contributes to a deeper understanding of how ad-blocking reshapes global digital marketing and offers guidance for developing more sustainable and consumer-friendly advertising ecosystems (Redondo & Aznar, 2018; Yan et al., 2022).

2. Literature Review

The literature on ad-blockers spans marketing, information systems, and consumer behavior, with three broad themes emerging: adoption drivers, impacts

on stakeholders, and adaptation strategies. Research consistently finds that users adopt ad-blockers due to concerns over intrusiveness, clutter, privacy, and security, as well as a desire for improved browsing performance (Redondo & Aznar, 2018; Frik et al., 2020). Studies in human–computer interaction highlight that irritation from disruptive formats, such as pop-ups and autoplay videos, increases the likelihood of ad avoidance, both through selective attention and technical blocking (Cho, 2004; Baek & Morimoto, 2012). These findings indicate that adoption reflects both functional and psychological dimensions of consumer control.

Scholars also examine the consequences of ad-blocking for publishers and advertisers. Large-scale empirical work shows reductions in advertising reach and revenue streams, but also improved site performance and potentially higher user satisfaction (Miroglio et al., 2018; Yan et al., 2022). Evidence from digital journalism suggests that heavy reliance on intrusive ads erodes trust, whereas cleaner environments may paradoxically enhance consumer loyalty despite blocked impressions (Shiller et al., 2018). This heterogeneity underscores that ad-blockers shift the balance between monetization and user experience, with outcomes contingent on industry context.

Adaptation strategies have therefore become a prominent research focus. Browser initiatives such as “acceptable ads”, alongside publisher responses like subscription models, data exchanges, and less intrusive formats, reflect attempts to realign advertising with user expectations (Page Fair, 2017; Mathur et al., 2018). Studies emphasize that transparency and relevance can mitigate ad avoidance, with contextual and native advertising perceived as less intrusive than traditional display

ads (Goldfarb & Tucker, 2011; Wojdyski & Evans, 2016). Moreover, cross-cultural research suggests that perceptions of privacy and fairness influence how users engage with digital ads and blocking technologies, indicating that global adaptation requires sensitivity to local norms (Boerman et al., 2017).

Overall, the literature reveals that ad-blocking is not merely a technical barrier but a consumer-driven demand for higher-quality, privacy-sensitive marketing. The shift has compelled advertisers and publishers to innovate toward respectful, less disruptive strategies, with broader implications for the sustainability of global digital marketing ecosystems.

3. Methods

This study employed a systematic literature review approach to synthesize evidence on how ad-blockers influence global digital marketing. Searches were conducted across major academic databases including Scopus, Google Scholar, Web of Science, and ScienceDirect, using combinations of keywords such as “ad-blockers”, “digital advertising”, “online marketing”, “consumer behavior”, and “privacy in advertising”. To ensure rigor, the inclusion criteria limited studies to peer-reviewed journal articles and scholarly conference proceedings. Industry reports were considered only when widely cited in academic literature, while blog posts, opinion pieces, and non-peer-reviewed sources were excluded.

The review process followed a structured screening protocol. Titles and abstracts were first examined for relevance, and full-text articles were assessed against the inclusion criteria. Data extraction focused on research objectives,

theoretical frameworks, methodologies, and key findings relating to ad-blocker adoption, advertising impacts, and adaptation strategies. The selected studies were then thematically coded into categories that captured consumer drivers, publisher and advertiser outcomes, and industry responses. This approach enabled cross-study comparisons and identification of patterns, contradictions, and gaps in the literature, providing a foundation for the subsequent results and discussion.

4. Results and Discussion

The literature reveals that ad-blockers represent both a disruption and a catalyst for adaptation in digital marketing. Adoption is consistently linked to consumer perceptions of intrusiveness, clutter, and privacy invasion. Studies indicate that formats such as autoplay videos, pop-ups, and hyper-targeted retargeting generate irritation and lead users to adopt blocking tools as a form of control (Cho, 2004; Baek & Morimoto, 2012). In parallel, research shows that users perceive tangible benefits from blocking, including faster page load times, reduced tracking, and an improved browsing experience (Mathur et al., 2018; Frik et al., 2020). These findings suggest that adoption is not merely reactive but reflects a broader consumer demand for respect, efficiency, and autonomy in digital environments.

For advertisers and publishers, the consequences are complex. On one hand, ad-blocking directly reduces impressions and click-through opportunities, challenging revenue models that rely on large volumes of display advertising (Miroglio et al., 2018). On the other hand, some evidence suggests that users who adopt blockers may engage more positively with content in environments free from

intrusive advertising. For example, studies in online news contexts find that ad-blockers can indirectly increase perceptions of site quality and encourage repeat visits (Yan et al., 2022). Similar work shows that intrusive advertising undermines trust, while cleaner formats or subscription models may strengthen long-term loyalty (Shiller et al., 2018). This indicates that the impact of ad-blockers cannot be assessed solely in terms of lost impressions, as they also reshape consumer perceptions of media quality and brand credibility.

The rise of ad-blocking has also spurred a wave of adaptation strategies. Some browsers and publishers have embraced “acceptable ads” frameworks, which prioritize less disruptive formats and attempt to balance monetization with user tolerance (Page Fair, 2017; Mathur et al., 2018). Others have turned toward alternative revenue streams, such as subscriptions, micropayments, or native advertising. Studies highlight that native and contextual ads are often perceived as less intrusive and more relevant, improving engagement while avoiding the backlash associated with disruptive formats (Goldfarb & Tucker, 2011; Wojdynski & Evans, 2016). Cross-platform research further demonstrates that contextual targeting—based on content rather than personal data—can achieve effectiveness while reducing privacy risks (Bleier & Eisenbeiss, 2015; Boerman et al., 2017).

Ethical and regulatory debates are increasingly relevant. As privacy regulation tightens, ad-blocker adoption intersects with broader consumer rights discourses. Research shows that transparency and fairness strongly influence consumer acceptance of digital advertising, and that firms ignoring these principles risk reputational harm (Tucker, 2014). Moreover, cross-cultural studies reveal significant

variation in consumer tolerance for online advertising, suggesting that adaptation strategies must be tailored to local expectations and norms (Jung, 2017). These insights highlight that the ad-blocking phenomenon extends beyond technology, representing a shift in the social contract between consumers, advertisers, and platforms.

Taken together, the findings suggest that ad-blockers have transformed global digital marketing by accelerating the demand for respectful, privacy-conscious practices. Rather than viewing them purely as a threat, the literature frames ad-blockers as a forcing mechanism that compels marketers to improve ad quality, experiment with alternative models, and place greater emphasis on consumer trust. This transformation underscores a central theme: the sustainability of digital marketing depends not only on technological innovation but also on aligning advertising practices with consumer expectations of fairness, relevance, and transparency.

5. Conclusion

This review highlights that ad-blockers have transitioned from a disruptive consumer technology to a structural force shaping the trajectory of global digital marketing. Their widespread adoption reflects deeper consumer demands for privacy, control, and a more seamless browsing experience. Evidence consistently shows that intrusive and poorly designed ad formats are the primary drivers of adoption, while the perceived benefits of faster performance and reduced tracking further reinforce their use. Ad-blocking is therefore more than a technological

phenomenon; it represents a shift in consumer expectations regarding fairness and respect in the online advertising ecosystem.

The findings also illustrate that the effects of ad-blocking are heterogeneous across industries and platforms. For publishers, ad-blockers reduce inventory and revenues in the short term, yet cleaner user experiences can improve perceptions of site quality and foster long-term loyalty. Advertisers, meanwhile, face challenges in reaching fragmented audiences but have responded with strategies such as contextual advertising, native formats, and subscription models that align better with user preferences. These adaptation strategies demonstrate that ad-blockers function not only as a constraint but also as a catalyst for innovation, compelling the industry to experiment with less intrusive and more sustainable approaches.

Finally, the review underscores the ethical and regulatory dimensions of ad-blocking. As debates over privacy, transparency, and algorithmic fairness intensify, ad-blockers amplify consumer resistance to opaque and intrusive practices. The broader implication is clear: the sustainability of digital marketing will depend on reconciling monetization with consumer welfare. Future research and practice must therefore integrate technological, ethical, and cultural considerations to ensure that digital advertising evolves toward more accountable, privacy-conscious, and globally adaptable models. In this way, ad-blockers serve as both a warning and an opportunity—pushing marketers to realign practices with the values and expectations of the digital age.

References

- Baek, T. H., & Morimoto, M. (2012). Stay away from me. *Journal of advertising*, 41(1), 59-76.
- Bleier, A., & Eisenbeiss, M. (2015). Personalized online advertising effectiveness: The interplay of what, when, and where. *Marketing Science*, 34(5), 669-688.
- Boerman, S. C., Kruikemeier, S., & Zuiderveen Borgesius, F. J. (2017). Online behavioral advertising: A literature review and research agenda. *Journal of advertising*, 46(3), 363-376.
- Cho, C. H. (2004). Why do people avoid advertising on the internet? *Journal of Advertising*, 33(4), 89-97.
- Frik, A., Haviland, A., & Acquisti, A. (2020). The impact of Ad-Blockers on product search and purchase behavior: a lab experiment. In 29th USENIX Security Symposium (USENIX Security 20) (pp. 163-179).
- Goldfarb, A., & Tucker, C. E. (2011). Privacy regulation and online advertising. *Management science*, 57(1), 57-71.
- Jung, A. R. (2017). The influence of perceived ad relevance on social media advertising: An empirical examination of a mediating role of privacy concern. *Computers in human behavior*, 70, 303-309.
- Mathur, A., Vitak, J., Narayanan, A., & Chetty, M. (2018). Characterizing the use of Browser-Based blocking extensions to prevent online tracking. In Fourteenth symposium on usable privacy and security (SOUPS 2018) (pp. 103-116).

- Miroglio, B., Zeber, D., Kaye, J., & Weiss, R. (2018). The effect of ad blocking on user engagement with the web. In Proceedings of the 2018 world wide web conference (pp. 813-821).
- Page Fair. (2017). 'The state of the blocked web: 2017 global adblock report. Page Fair Research. Retrieved From <https://www.iabuk.com/white-paper/pagefair-2017-global-adblock-report>
- Redondo, I., & Aznar, G. (2018). 'To use or not to use ad blockers? The roles of knowledge of ad blockers and attitude toward online advertising. *Telematics and Informatics*, 35(6), 1607-1616.
- Shiller, B., Waldfogel, J., & Ryan, J. (2018). The effect of ad blocking on website traffic and quality. *The RAND Journal of Economics*, 49(1), 43-63.
- Tucker, C. E. (2014). Social networks, personalized advertising, and privacy controls. *Journal of marketing research*, 51(5), 546-562.
- Wojdyski, B. W., & Evans, N. J. (2016). Going native: Effects of disclosure position and language on the recognition and evaluation of online native advertising. *Journal of Advertising*, 45(2), 157-168.
- Yan, S., Miller, K. M., & Skiera, B. (2022). How does the adoption of ad blockers affect news consumption?. *Journal of Marketing Research*, 59(5), 1002-1018.