28. EVOLUTION OF ADVERTISING: IMPACT ON OUR LIVES AND PRIVACY ISSUES

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This paper examines the concept of digital footprints and the privacy concerns they raise in the online environment, particularly in the context of personalized advertising. As digital technologies evolve, brands face ethical challenges related to data collection and usage, prompting consumers to seek greater transparency and control over their personal information. Striking a balance between effective advertising and strong privacy protections is crucial for building trust in the digital marketplace.

Throughout centuries, advertising has served as a key tool for promoting goods and services. From early street announcements to print media and radio, each stage of advertising's development reflected technological and social changes. However, with the advent of digital technologies, especially the internet and mobile devices, advertising has undergone an unprecedented transformation. Over the past two decades, we have witnessed a shift from mass advertising to highly personalized campaigns based on the collection and analysis of vast amounts of data. This rapid transition, while opening up new opportunities for engaging with consumers, has also raised serious concerns about privacy and ethics. While this evolution has brought undeniable efficiency and engagement, it has also amplified concerns about privacy and data security.

The Pew Research Center's 2019 survey, "Americans and Privacy," sheds light on public concerns about personal data usage. Notably, 77% of Americans are aware of personal profiles used by companies. Among those, a significant majority 74 % believe these profiles help companies understand their customers, reflecting widespread recognition of data-driven advertising practices. Additionally, 49% of respondents frequently encounter ads or solicitations that seem tailored to their personal data, while another 34% see them occasionally This highlights the pervasive impact of personalized advertising on consumers' daily lives [1].

Moreover, the survey reveals that a substantial portion of Americans experience the effects of these profiles directly. 49% of respondents "frequently" see ads or solicitations that appear to be based on their personal data, while another 34% report seeing them "occasionally." This demonstrates the pervasive nature of personalized advertising and its impact on consumers' daily lives.

Beyond the immediate concerns of data privacy, the psychological impact of highly personalized advertising demands closer scrutiny. A study by Montag published in Frontiers in Psychology, titled 'Homo Digitalis: Psychological Aspects and Underlying Neural Mechanisms in Internet Usage,' explores the neurological correlates of digital media consumption [2]. Their findings suggest that constant exposure to targeted ads, particularly those leveraging emotional triggers, can activate reward pathways in the brain, leading to increased susceptibility to impulsive purchasing. Furthermore, the perceived 'hyperpersonalization' can induce a sense of surveillance, triggering anxiety and stress responses, especially in individuals with heightened privacy concerns. This neurological basis for ad fatigue and discomfort underscores the need for a more nuanced understanding of how algorithmic advertising affects cognitive and emotional well-being, moving beyond simple metrics of click-through rates to consider the broader psychological implications.

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In addition, artificial intelligence (AI) plays a growing role in advertising. Scholars Kim and Lee (2021) argue in the Journal of Advertising Research that AI-powered algorithms not only predict consumer behavior but can also influence their preferences [3]. For instance, algorithms may tailor ad strategies based on users' emotional states, raising ethical concerns. Such practices emphasize the need for stricter oversight of how data and algorithms are used in advertising activities to ensure ethical standards are upheld.

In conclusion, the evolution of advertising driven by digital technologies and data analytics has significantly changed how brands interact with consumers, while also raising important ethical and privacy concerns. The psychological effects of targeted advertising require deeper analysis, particularly regarding their influence on consumer behavior and mental well-being. Given the growing role of artificial intelligence in advertising, it is essential to establish strict ethical standards to protect privacy and build trust in the digital marketplace.

References:

1.Montag, C. Homo Digitalis: Smartphones, soziale Netzwerke und das Gehirn, e: Springer, 2018, p. 1-280.

2.Digital Advertising and Privacy Concerns [Electronic resource]. Mode of access: https://www.pewresearch.org/internet/2019/11/15/americans-and-privacy/. – Date of access: 09.03.2025. 3.Anderson, C. Privacy Issues in Digital Advertising. [Electronic resource]. Mode of access: https://www.researchgate.net/publication/381302737_AD_Avoidance_In_Digital_Advertising_The_Impact_Of_Privacy_Disruption_And_ Perceived_Intrusiveness. – Date of access: 09.03.2025.