



Progress and Prospects of Web Design for Advertising Pages

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Abstract. This article delves into the role of advertising in commercial non-personal communication in modern society, as well as the characteristics of online advertising and various demands with the development of the Internet. The result demonstrates that the development of Internet advertising technology has brought targeted advertising based on user preferences, improving the efficiency and measurability of advertising, however, there are still challenges and limitations such as privacy protection, advertising interference, and advertising effectiveness evaluation. The demands of advertisers and users for advertising websites are constantly evolving, and internet advertising, while meeting the needs of both parties, also raises privacy issues. Further comparisons and analyses are made on the design routes and user experiences of different types of advertising websites. This article uses Twitter as an example to discuss advertising formats and user feedback data. Finally, the article looks ahead to the future of advertising website design, emphasizing the importance of audience psychological cognition in internet advertising design, and providing reference and guidance for optimizing internet advertising design patterns. This article comprehensively discusses the evolution of online advertising design and user experience, offering valuable insights and guidance for future internet advertising design and innovation.

Keywords: Web design, Advertising pages, User experience.

1 Introduction

Over the years, the field of web advertising design has undergone a remarkable evolution, reflecting dynamic interactions between technology, creativity, and user engagement. From early static banner ads to today's immersive and interactive experiences, web advertising continues to push the boundaries of design innovation to attract the attention and interest of online audiences [1]. Current research in web advertising design has made significant progress in areas such as immersive experiences, personalized advertising, and data-driven advertising targeting [2]. However, challenges and limitations persist, including issues related to privacy protection, advertising intrusiveness, and advertising effectiveness evaluation [3]. Despite ongoing technological advancements, balancing advertising innovation with user experience remains a pressing issue. In general, research in the field of web

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advertising design is advancing, yet it must address numerous challenges and consider the delicate balance between technology, creativity, and user experience. This article examines the past, present, and future of web advertising design, highlighting that this field is not only influenced by evolving trends and technologies but also by changing user demands and preferences [4]. This review paper aims to explore the evolution of web advertising design, analyze shifts in advertising demands, and delve into diverse user experiences related to different types of web advertising. By examining past achievements, current trends, and prospects, and understanding the intricate relationships between design aesthetics, user engagement, and the ever-evolving digital advertising ecosystem, valuable insights are gained [5]. Through an in-depth exploration of the evolution of web advertising design and user experience, this article offers a comprehensive understanding of the development of the digital advertising ecosystem, providing valuable insights and guidance for future web advertising design and innovation.

2 Design Requirements of Advertisement Website

2.1 Origin of the Online Advertisement

In modern society, advertising is considered a paid form of non-personal communication in business, used to communicate with target markets about products and services. It encompasses both visual and non-visual forms of marketing communication where specific sponsors communicate non-personal information to promote products and services. Some backers are typically companies striving to promote their businesses or ideas. Advertisement is carried out through various media sources including newspapers, magazines, television, radio, outdoor advertising, direct mail, social media, blogs, websites, and text messages. However, with the development of the internet, web pages have emerged as a new mainstream information medium and have become one of the primary platforms for advertising. In 2005, the Internet fundamentally transformed advertising [6]. Previously, ads were delivered in a one-to-one manner to individual communities, but the advent of the Internet allowed ads to be distributed across multiple communities, significantly increasing the reach and efficiency of advertising. The rise of online advertising has brought new opportunities and challenges to the advertising industry. Through online advertising, businesses can target audiences more precisely and engage in personalized marketing, but they also face challenges such as privacy concerns, advertising intrusiveness, and evaluating advertising effectiveness. As technology advances and the importance of user experience becomes more prominent, balancing advertising innovation with user experience is a pressing issue in the field of advertising design. Future research may need to focus more on user engagement, the long-term impact of advertising effectiveness, and the application of emerging technologies to provide valuable insights and guidance for the development of the advertising industry.

2.2 Characteristics of Modern Web Advertising

As Internet advertising technology advances, personalized advertising tailored to user preferences is increasingly favorable for both the market and users. The benefits of Internet advertising encompass: (1) reaching a diverse consumer base, (2) reduced financial expenses in contrast to traditional advertising methods, and (3) easier, more precise tracking of advertising performance through a variety of analytical tools. Potential drawbacks of Internet advertising may involve the necessity for technical proficiency [7].

2.3 Demand of Advertisers and Users for Advertisement Websites

Advertisers pursue profits and aim to achieve better promotion results with lower costs, while users hope to receive appropriate product information without having to pay for ads or pay minimal fees. These two demands seem to be perfectly met by internet advertising [6]. Unlike the era of traditional advertising, such as newspapers, users no longer bear the cost of ads when they are online, and advertisers can simultaneously reach more users with demand. However, users' private information is being utilized, causing additional losses to users.

3 Comparison and Analysis of Different Types of Advertising Websites

3.1 Analysis of Design Direction/form and Adaptation Scenarios of Advertising Websites

Different platforms have varying user demographics, leading to distinct levels of acceptance of advertisements. Taking the Twitter community as an example, research can utilize web crawlers to gather data on user engagement, number of tweets, trust levels, etc., within Twitter to strategically place advertising web pages. This approach allows for determining the number of sub-communities to target based on the needs of advertising companies, reducing placement costs. By using the core users of these communities as the advertising carriers, the amount of analyzed data is relatively small, improving system efficiency and creating a mutually beneficial outcome for the company and the primary users of the community [8].

3.2 Comparison and Analysis of User Experience on Advertising Websites

Twitter advertising mainly includes Promoted Tweets, Promoted Accounts, and Promoted Trends. These ads typically appear on users' timelines to increase exposure and attract user attention.

In terms of design approach, Twitter ads are usually designed to be similar to the content on users' timelines to maintain consistency and user experience. Advertisements often use compelling copy, images, or videos to attract user clicks and interactions. Additionally, Twitter targets ads accurately based on users' interests, geographical location, and other information to improve ad click-through rates and conversion rates.

3.3 User Feedback Analysis

Like most other social networking services, Twitter offers its services to users for free and relies on an advertising revenue model. Twitter introduced paid advertising in 2010, and its ad revenue has been steadily growing, especially on mobile platforms, currently accounting for 90% of ad revenue. Nevertheless, Twitter has been prudent in safeguarding user experience and preventing an excessive influx of advertisements. The level of ad saturation on Twitter is perceived to be lower in comparison to other prominent online platforms like Google Search or Facebook [9].

However, there are still users who are dissatisfied with advertisements, so they may choose to use ad blockers to avoid excessive ad pushes and block ads they do not wish to see [10].

3.4 Discussion on Future Advertising Website Design

The popularization and development of the Internet have driven the evolution of internet advertising design, leading to a trend of orderly growth in market size. Starting from the psychological cognition of internet advertising audiences, the research explores the importance of audience psychology in Internet advertising design. Based on this viewpoint, by analyzing the relationship between geometricization, youthful color schemes, minimalist layout, and audience psychological needs in internet advertising design elements, the study clarifies the connection between different design elements and consumer psychological cognition. The research also discusses the composite application of design elements in the process of internet advertising design, as well as the parallel model of multiple psychological needs of the audience, aiming to provide reference and guidance for optimizing internet advertising design patterns [11].

4 Conclusion

In summary, through the exploration of the evolution of online advertising design, this paper reveals the story of innovation, adaptability, and user centered. From the simple banner ads of the past to the interactive and personalized experiences of today, online advertising continues to evolve to meet the changing needs and preferences of users. The shift to more immersive and engaging ad formats reflects a deeper understanding of user behavior and the importance of building meaningful connections with audiences in the digital realm. Looking to the future of online advertising design, personalization, interactivity, and seamless integration with the user experience will continue to be key drivers of success. The emergence of artificial intelligence and machine learning technologies will further revolutionize the way advertising is targeted, delivered, and optimized for maximum impact. In these advances, however, the fundamental principles of creativity, authenticity, and user engagement will remain at the heart of effective online advertising design. Ultimately, the success of online advertising design lies in its ability to strike a harmonious balance between creative innovation, user relevance, and technological advancement. By paying attention to users' changing needs and preferences while embracing

cutting-edge technology and design trends, web advertisers can create engaging and impactful advertising campaigns that resonate with viewers in meaningful ways. With the ever-changing landscape of digital advertising, one thing is certain - the art and science of online advertising design will continue to shape and redefine the way brands connect with their audiences in the digital age.

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