

The Evolution of Advertising Techniques from Traditional Methods to Artificial Intelligence

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Abstract:

This article explores the evolution of advertising techniques from traditional media such as newspapers, radio, and television to modern methods including online advertising and social media, and ultimately to the use of artificial intelligence in the advertising industry. Historically, advertising relied on traditional channels that, while offering broad reach, were associated with high costs and faced challenges in measuring effectiveness and engaging audiences. The advent of modern technologies has enabled more precise and specialized advertising through audience targeting based on behavioral and demographic data, facilitating performance measurement and enhancing direct interaction. Today, artificial intelligence heralds a new era in advertising, with its ability to analyze vast datasets and deliver accurate consumer behavior predictions, empowering companies to effectively customize advertising content. This article aims to illuminate the various stages in the evolution of advertising techniques—from traditional to modern, and the integration of artificial intelligence—highlighting the challenges at each stage. It emphasizes the necessity of embracing technological innovations to ensure the success of advertising campaigns in the digital age and to foster deeper, more effective engagement with target audiences.

Keywords: advertising, digital advertising, artificial intelligence, advertising content, target audience.

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Introduction:

Over the past century, advertising techniques were limited in their means and tools, relying primarily on newspapers, magazines, radio, television, cinema, and street billboards. These traditional media had the advantage of reaching a broad audience but lacked precision in targeting specific segments of the public and faced difficulties in accurately measuring their impact. Advertising largely depended on experience and trial despite the scarcity of data supporting advertising decisions.

With the dawn of the 21st century, the rapid technological advancements brought about a radical transformation in the field of advertising. The internet emerged as the primary medium for communication and advertising, offering unprecedented opportunities for digital advertising. This led to the emergence of new techniques such as search engine ads, social media ads, and video

advertisements, which allowed for more precise audience targeting and immediate responsiveness to market changes and consumer behavior.

Amidst these modern developments, artificial intelligence (AI) has emerged as one of the most significant tools revolutionizing the advertising industry. AI techniques rely on analyzing vast amounts of data to understand user behavior and expectations, enabling the creation of personalized ads for each individual. This ability to customize and precisely target ads has made advertising more effective and engaging for consumers, allowing ads to appear at the right time and place for the appropriate audience.

Despite the substantial benefits AI has brought to advertising techniques, several complex challenges have emerged. Among these challenges are issues related to privacy and digital security, with growing concerns about how personal data is collected and used. Both companies and consumers question the ethics of using AI in advertising and whether it could lead to privacy violations or manipulation of consumer purchasing behavior. Additionally, there are technical challenges concerning the management and continuous development of these systems to ensure their effectiveness and accuracy.

This raises the primary question: How has the transition from traditional advertising techniques to the use of artificial intelligence impacted the effectiveness of advertisements and audience response? What are the ethical and technical challenges associated with using AI in this field?

1. Conceptual Introduction to Advertising:

1.1 Definition of Advertising:

1.1.1 Linguistically

Advertising has been defined in various ways, primarily due to the diverse scientific disciplines and fields interested in it. In Al-Firuzabadi's "Al-Qamoos Al-Muheet," advertising is derived from the root word "shahar," which means to announce or make something known to the public (1). Ibn Manzur defines it as "fame," referring to the visibility of something until it becomes well-known (2).

Linguistically, advertising also means fame in the sense of clarity, where we say "its fame" indicates the matter's clarity. The term can also mean "to draw a sword" from its sheath (3).

1.1.2 Terminologically

Advertising is defined as the fame produced through the use of media methods, whether visual, written, or auditory, which contribute to attracting the audience's attention (4). The American Marketing Association defines it as various activities leading to the publication or broadcasting of visual and auditory advertising messages to the public to encourage the purchase of goods or services. It is also a non-personal means of presenting ideas and promoting goods and services by a known entity in exchange for a paid fee (5).

A.Cadet and B.Calehlat describe it as "a mode that creates a certain culture guiding individuals towards consumption, or influencing their thinking and behavior. It is a social institution that

harmonizes between the producer and the consumer, making it a technique for social integration."(6)

Advertising can be generally defined as non-personal communication aimed at promoting a particular good or service to attract the attention of the targeted audience and encourage them to take specific actions, such as purchasing, subscribing, or interacting with the brand (7). This is done through various media such as television, radio, the internet, newspapers, and magazines, in exchange for a fee. It also employs a variety of creative methods, such as visual ads, text messages, videos, and digital content.

1-2. The Emergence and Evolution of Advertising Techniques

Advertising is not a new art; it is as old as history itself. Advertising began in various forms that evolved over centuries into the art we know today. Advertising is an activity as ancient as human societies, dating back to the beginning of civilization when early humans used it to meet their needs and communicate their requirements to others to establish mutual relationships and achieve shared benefits. This was initially done through town criers dispatched by kings and rulers, who would gather people by beating drums to deliver their messages. Rulers used these calls to convey orders and decisions to the masses and specify their obligations to authorities to meet the rulers' demands (8).

In its early forms, advertising served as a means of disseminating ideas, facts, and events prevalent in ancient societies. Around 1000 BCE, the ancient Egyptians used advertising, such as a prince offering a reward for the return of his runaway slave (9). The earliest forms of advertising included town criers in ancient cities like Babylon, Athens, and Rome, who announced significant events, such as ship arrivals, trade caravan arrivals, and the goods carried, along with the merchants' names. This primitive form of advertising, known as "town crying," was essentially commercial, aimed at marketing and promoting goods. It is likely that traders paid for these services to promote their merchandise (10).

The Greeks also invented what is known today as the jingle—a rhymed poem performed by individual or group voices, often accompanied by music, to promote products. In ancient Greece, town criers announced the arrival of goods with a musician to create a rhythm that made the announcements more appealing to listeners. In Rome, early forms of posters have been discovered in Pompeii (11).

In the pre-Islamic Arab world, advertising was also known, especially in the Souk Okaz, a major economic, cultural, and artistic gathering. Advertising methods varied across ancient civilizations, including the Assyrians, Romans, Babylonians, and Phoenicians, utilizing the means and techniques available in each era and culture (12).

Later, symbols and signs, or "visual expressions," were used to denote the names of sellers, craftsmen, or traders, indicating their business location and type of goods or services. For example, a cup and a snake symbolized pharmacies, a crescent indicated a doctor, ivy wreaths marked liquor stores, windmill shapes signified storage facilities, a skull warned of danger, a goat's head indicated a dairy store, wooden shoes represented shoemakers, and a white and red striped pole signified barbershops (13).

Advertising is as old as communication methods, with the earliest being the press. However, its widespread popularity is relatively modern, with the first newspaper ads appearing in London in 1625. The term "advertising" as we understand it today was first used in 1655, covering books, medicines, tea, coffee, and lost items, among other things.

The 20th century brought new media for advertising, such as cinema, radio, and television. These new media significantly advanced advertising, with the first cinema commercial created by the Lumière brothers in 1904. Radio advertising began in 1922 in the United States, followed by France, where publisher Albin Michel signed the first radio advertising contract with the station RADIOLA. Television advertising started in the United States in 1947, used by companies to promote products and facilitate sales. In France, television advertising was not authorized until 1968, as Western European countries initially viewed it as negatively influencing consumer behavior, misaligning it with actual needs. Subsequently, television became one of the primary means of disseminating advertising messages, becoming a crucial funding source for TV channels (14).

In June 1994, a legal firm based in Phoenix published an innocuous ad in a newsgroup directory, announcing its services related to U.S. immigration law. The response was enormous, receiving about 20,000 expressions of interest at a cost of virtually nothing—an unprecedented response rate for non-targeted spam mail. However, it also sparked outrage among newsgroup users, resulting in about 30,000 angry responses, including death threats, leading to the closure of their internet account. This incident clearly indicated that internet advertising was unwelcome at the time (15).

Continuous advancements in business prompted companies to create their own websites to market their products. Internet advertising expenditures grew from \$45.7 million in 1995 to \$300 million in 1996, \$1 billion in 1997, \$2 billion in 1998, and \$3 billion in 2000, eventually skyrocketing to \$33 billion in 2004. This rapid increase highlights the fast-growing volume of electronic advertising worldwide (16).

In 2005, the United States alone accounted for \$32 billion in advertising investment. According to PNS Media Intelligence, internet advertising in France grew by 48.2% in 2006, making the internet the primary driver of the advertising market in France, with a total investment of €2 billion. France was among the fastest-growing markets in Europe, with growth rates of 65% in Germany, 45% in Italy, 37% in the UK, and 28% in Spain. By 2011, internet advertising revenues in the United States alone reached \$31 billion, surpassing newspaper advertising (17).

In the Arab region, electronic advertising is still lagging behind the rapid global growth of the electronic advertising market. The director of Net Advantage, an internet-specialized agency, noted that Arabic internet ads grew from \$7-10 million in 2005, a small fraction of the global internet advertising market, which was worth \$2.8 billion in early 2005 (18).

The roots of artificial intelligence in advertising can be traced back to the 1990s when the internet began to gain widespread popularity. Marketers realized the potential of using data to understand consumer behavior and deliver targeted ads, leading to the development of rule-based systems where algorithms matched ads with specific keywords or demographic information. These systems have been refined over time and now form the backbone of many marketing activations. In fact,

targeted advertising has never been more prominent and is expected to become even more intelligent in the coming years (19).

1-3. Traditional Advertising Techniques and Their Forms:

Advertising is classified according to the media used into the following categories (20):

- **Written Advertising:** This type includes various mechanisms and means such as newspapers, books, magazines, newsletters, articles, reports, posters on city and street walls, perfume bottles, food packaging, soap, and billboards in football stadiums and sports halls. It appears in any place with a high concentration of people to maximize its reach and spread to as many consumers as possible.
- **Audio Advertising:** This type of advertising utilizes sound and spoken words through radio broadcasts, lectures, seminars, and mosque sermons. Audible advertising is one of the oldest methods used to promote something. The performance style and tone of voice play a crucial role in influencing the audience and consumer, prompting them to make purchases.
- **Audio-Visual Advertising:** This form primarily uses television as its medium, incorporating sound, visuals, music, color, performance style, and movements. A team of specialized workers, including directors, cameramen, decorators, makeup artists, lighting technicians, and actors, collaborates on its production. All these elements collectively influence the audience, motivating and encouraging them to purchase the advertised products.

1-4. Characteristics of Traditional Advertising Media:

Traditional advertising media are characterized by several features, summarized as follows (21):

- **Non-Paid Model:** Advertising is a form of publicity linked to peer communication, often not relying on direct costs to promote goods or services. Instead, it depends on indirect costs, such as a company needing a certain amount of money to accomplish a specific task or other significant expenses.
- **Use of Various Media:** Advertising has the ability to diversify its promotional methods through television, newspapers, and other agencies to implement an advertising strategy.
- **Cost Determination:** Advertising can be implemented at minimal costs compared to regular advertisements. Often, companies need to spend a small amount to achieve the desired goal.
- **Mass Coverage:** Television and radio advertising acts as mass communication, ensuring its spread and reaching large audiences simultaneously. It also benefits from extended time coverage, evident in advertisements appearing throughout the morning and evening periods, making it a mass message (22).
- **Feedback Collection:** It allows for knowing viewers' reactions or obtaining feedback on a particular advertisement through opinion polls or public opinion studies conducted by polling companies (23).

1-5. Functions of Advertising:

Advertising has several unique functions that distinguish it from other elements (24):

1. **Providing Information:** Advertising provides information that can be used as a basis for distinguishing and comparing various goods and services. The increase in production and variety of goods resulting from the industrial revolution created a need for such information.
2. **Achieving Satisfaction:** Advertising plays a crucial role in marketing goods and services, especially when products have similar characteristics and differ mainly in their brand names.
3. **Market Segmentation:** Marketers focus their efforts on specific segments and categories, offering products that meet the needs of these segments. This concept, known as market segmentation, helps companies reach different market segments.
4. **Quick Impact:** Advertising is a component of the marketing mix that can be quickly and easily changed in response to crises or issues such as declining sales or inventory shortages.
5. **Costs:** Advertising is one of the most expensive elements of the promotional mix. Various writings suggest that advertising costs can account for up to 25% of total marketing expenses, highlighting the importance of effective planning for advertising campaigns.
6. **Crisis Management:** Advertising plays a vital role in addressing crises that may arise from a shortage of goods in the market at certain times by guiding and educating consumers on how to use products and where to find them.
7. **Non-Price Competition:** The importance of advertising has increased as producers try to avoid price competition and price wars by relying on other elements of the marketing mix, such as product differentiation, distribution methods, promotion, and providing information to influence demand.

1-6. Importance of Advertising:

Mohamed Farid Al-Sahn summarizes the importance of advertising as follows (25):

- **Providing Information:** From the perspectives of both companies and consumers, advertising provides information that can be used to compare various products.
- **Achieving Consumer Satisfaction**
- **Quick Impact and Crisis Management:** Advertising, as part of the marketing mix, can be quickly and easily altered to address specific crises or problems, such as declining sales or product shortages.
- **Non-Price Competition:** The importance of promotion, especially advertising, has increased as producers aim to avoid price competition and price wars by focusing on other elements of the marketing mix, such as product differentiation, distribution methods, and promotion to influence demand.

2. Electronic Advertising: Modern Techniques and Innovative Types in the Digital Space:

2-1. Concept of Electronic Advertising:

Electronic advertising is the non-personal transmission of information through various media, typically persuasive in nature, about products (goods and services) or ideas. It is usually paid for by a known sponsor, and all paid spaces on websites or email are considered advertising (26).

Electronic advertising is also defined as "one of the promotional policies that rely on electronic media to convey the advertising message to attract customers and convince them to purchase the product." (27)

Since electronic advertising uses the internet, it involves a combination of text, sound, and static or moving images in a form that aligns with individual preferences and needs. It is typically a paid activity aimed at persuading the electronic consumer audience with the content (28).

From the above, we can say that electronic advertising uses digital technologies and the internet to promote products, services, and ideas. It includes various methods and media, such as website advertisements, email, social media, search engines, and mobile applications. Electronic advertising aims to reach the target audience effectively and efficiently by analyzing user data and customizing content based on their interests and behaviors.

2-2. Types of Electronic Advertising:

There are many types of electronic advertising, summarized as follows:

1. **Website Advertising:** Many advertisements fall into this category, where companies publish ads on various websites due to the growing interest in the internet and the conveniences and services it offers (29).
2. **Social Media Advertising:** This is the second most common and effective type of electronic advertising, as it closely targets the audience. Most users browse different social media platforms daily, often relying on them to search for products or services. Prominent platforms include Facebook, Twitter, Instagram, Snapchat, and LinkedIn. Advertising can be done through sponsored ads or influencer marketing on these platforms (30).
3. **Advertising Banners:** Organizations use this type of advertising to display ads on websites other than their own, featuring concise and attractive information about products and the organization, with the ad linked to the organization's website (31).
4. **Official Sponsorship Advertisements:** This is the second most common form of internet advertising, divided into two types:
 - **Regular Sponsorship Ads:** Where the seller entrusts an institution with a website to advertise their products on its pages for a fee based on the ad space.
 - **Content Sponsorship Ads:** The official sponsor not only advertises the seller's products but also helps craft the promotional message for the internet users, for a fee based on the ad space (32).
5. **Rich Media Advertising:** This refers to the most interactive electronic ads that utilize all audiovisual effects and are designed using specific programs like JAVA. These ads can interact with internet users by opening menus or providing additional information. Rich media ads may include

music clips that play when users click on the ad, and users can view products using 3D displays and zoom in for more details (33).

6. Linked Ads: These ads are associated with other websites on the internet, where the seller's site name appears only as a linked site on another institution's website.

7. Interstitial Ads: Similar to TV commercials that appear between programs, these ads appear during the brief waiting time for a page to load. This type is widely used in the United States (34).

8. Web Casting: The philosophy of web casting on the internet is based on push promotion techniques, where the advertiser pushes the promotional message to the potential buyer without waiting for them to visit the organization's website. Promotional messages are prepared in such a way that internet users can download them to their personal computers (35).

9. Sequential and Special Event Ads: These terms refer to all forms of advertising communication that present the advertiser's message in a unique form, not through a banner, sponsorship, or even partnership. For example, any site could serve as a place to showcase the advertiser's product in a way similar to scenes in movies (36).

10. Mobile Ads: These ads are transmitted through mobile phones, which have taken on many roles, especially after being linked to the internet. The most popular types are SMS (Short Message Service) and MMS (Multimedia Messaging Service) ads, especially with the significant technological advancement of smartphones.

11. Video Game Ads: Advertisers have become more important to video game players, a target group with studies showing that 82% respond positively to ads during gameplay. This type of advertising helps store product information and create a brand image (37).

2-3. Forms of Electronic Advertising:

Here are some of the most common forms:

1. **Horizontal Ads:** Found on almost all websites, these ads come in various shapes and contents but share a fundamental function of opening the advertised website upon interaction.

2. **Sidebar Ads:** Also known as skyscraper ads, these are vertical ads that can be up to 600 pixels tall and about 120 pixels wide. They are more effective because they remain in view as the user scrolls down the page, increasing the chances of being clicked (38).

3. **Pop-Up and Sequential Ads:** Pop-up ads appear in a new window when you enter a site, obscuring the page you are viewing until you close or move the ad, which can be annoying. Sequential ads appear below the content you are reading, making them slightly less intrusive (39).

4. **Floating Ads:** These ads appear when a visitor enters a page and remain visible for about 30 seconds, potentially blocking the content until they disappear. However, there is a close button for users to remove the ad.

5. **Text Ads:** This important type of electronic ad appears when conducting a search on sites like Google. These ads are shown alongside search results and are relevant to the user's search query (40).

2-4. Characteristics and Advantages of Electronic Advertising:

1. **Interactivity:** This feature allows consumers to interact with different advertising sites to get more information and answers to their questions about the advertised product. They can click on the ad for a tour of the product pages, or even try out the product, such as downloading and testing software (41).
2. **Creativity:** Creative website design can create a good image of the organization. Innovative and attractive websites can garner public admiration, giving the organization a certain status and encouraging repeated visits (42).
3. **Speed and Flexibility in Reaching the Audience:** Electronic advertising is available 24/7, enabling companies to monitor, update, and modify their ad campaigns continuously. This is a significant advantage over traditional media, where changing an unpopular ad is costly and complex (43).
4. **Multimedia Integration:** Internet advertising allows the use of text, sound, and visuals. Products can be shown in use, with all aspects highlighted, including 3D views. Users can also get samples like books or CDs through the internet.
5. **Privacy:** Internet advertising provides privacy that direct or TV sales cannot offer. Users can obtain detailed information and make purchasing decisions without pressure or embarrassment from sellers (44).
6. **Global Communication:** The internet provides cross-border communication, unlike traditional media, which faces geographical, political, and cultural boundaries. Internet advertising messages are considered borderless (45).
7. **Low Cost:** The internet is an effective medium for promotional campaigns and information delivery at minimal cost. It eliminates expenses like printing, postage, and labor, which are common in traditional advertising (46). The internet is generally cheaper, costing 2.5 to 6.6 times less than television, for example (47).
8. **Measurable Performance and Low Cost:** The effectiveness of internet advertising is continually proven by the cost-per-response metric. Using the web helps reduce advertising costs compared to traditional media, as evidenced by past practices (48).

3. Artificial Intelligence in the World of Advertising:

The online advertising industry is one of the primary users of artificial intelligence (AI), not only for monitoring user statistics but also for displaying ads that align with users' preferences and interests. The global digital advertising industry has surpassed \$300 billion, with expectations of further growth in the future (49).

3-1. Definition of Artificial Intelligence:

Artificial intelligence is defined as the capability of machines and digital computers to perform specific tasks that mimic and resemble those carried out by intelligent beings, such as the ability to think or learn from past experiences or other processes that require mental operations (50).

3-2. Intelligent Advertising:

Intelligent advertising represents a new phase in digital advertising. Since its first appearance in October 1994, digital advertising has evolved significantly, transforming the entire advertising industry into a new field of academic research over the past 25 years. We can say that interactive advertising was the first phase of digital advertising, programmatic advertising the second, and intelligent advertising the third. It is essential to note that the latest phase of digital advertising always retains the value and characteristics of the previous phase while adding new innovative features (51). Intelligent advertising focuses on fulfilling the recipient's desires by studying data and algorithms, accurately describing their needs and wants, surpassing mere predictions of their interests in various contexts and time frames, and recommending diverse advertising ideas tailored to each individual.

3-3. AI Techniques Used in Advertising:

- **Machine Learning:** Different machine learning techniques can enhance online targeted advertising, particularly in improving the reach and segmentation of targeted users (52).
- **Big Data Analysis:** Extracting value and knowledge from massive, diverse, and rapidly growing data sets, big data analysis is a significant AI application that substantially improves digital marketing strategies. It helps understand customer behavior, predict future actions, and identify audience preferences for better targeting (53).
- **Predictive Targeting:** AI uses data to make potential future predictions through predictive analysis. Companies like Amazon and Target have developed intelligent systems capable of anticipating customer needs based on purchase history and health status, sending product recommendations and ads to match future needs (54).
- **Ad Personalization:** AI improves ad customization by analyzing user data and learning preferences to deliver relevant ads, increasing click rates and ad conversions. Platforms like Google Ads use AI and big data analysis to effectively personalize ads (55).
- **Content Creation:** AI assists in creating appropriate advertising content, making content creation faster and easier. For instance, Coca-Cola uses AI to generate slogans and musical jingles automatically (56).
- **Social Media Analysis:** Techniques that mimic human mental capabilities in writing, editing, and content creation provide automated entertainment and marketing services. Analyzing social media data allows companies to make data-driven decisions and implement effective strategies, enhancing brand visibility and engaging target audiences (57).
- **Chatbots:** Automated systems respond to customer inquiries and collect data, providing continuous updates on products and services (58). Companies like Microsoft, Norton, and IBM use chatbots for customer support and interaction, enhancing post-purchase engagement (59).

3-4. Characteristics of Using AI in Advertising:

- **Faster Data Analysis:** AI enables advertisers to analyze complex data sets faster than humans, leading to efficient ad campaign development and implementation.

- **Accurate Targeting:** AI allows for deeper data analysis, linking complex data sets to uncover recipient insights, preferences, and desires, enhancing campaign planning and execution.
- **Increased Efficiency:** AI improves the efficiency and effectiveness of ad campaigns by ensuring they are highly relevant to the target audience, overcoming the challenges of inadequate data and imprecise audience targeting (60).
- **Budget Optimization:** AI can analyze ad spending and targeting data to recommend actions that improve performance, such as adjusting budgets and targeting parameters (61).
- **Enhanced User Experience:** AI uses recipient data (with prior consent) to improve services and deliver appropriate ad content, offering a more personalized and organized advertising experience.
- **Innovation and Creativity:** AI opens new possibilities for creativity and innovation in advertising, analyzing massive data sets to create unique, original ad designs, leading to unexpected creative concepts that capture user attention (62).

4. Differences between AI-Based and Traditional Advertising Techniques:

1. **Precise Audience Targeting:** AI uses machine learning to analyze big data and accurately identify target segments based on user behavior and personal interests, unlike traditional methods that rely on general demographics and audience studies.
2. **Personalization:** AI customizes ad messages based on individual behaviors and preferences, increasing effectiveness, while traditional techniques use general messages for a broad audience, limiting personalization.
3. **Data Analysis and Evaluation:** AI provides real-time data analysis for continuous campaign improvement, while traditional methods evaluate effectiveness post-campaign through surveys and interviews, hindering real-time adjustments.
4. **Efficiency and Cost:** AI reduces costs by automating processes and minimizing budget wastage, while traditional methods are more expensive due to significant human resources and high costs associated with media like TV and newspapers.
5. **Immediate Interaction and Adaptation:** Modern advertising technologies and AI can interact with real-time events and quickly adapt advertising campaigns according to new data and changes in the market. This contrasts with traditional technologies, which are often slow to adapt to rapid market changes and require a long time to make the necessary adjustments to keep up with sudden shifts in the market or surrounding environment.

Overall, the fundamental difference between AI technologies and traditional advertising technologies lies in the ability to analyze big data and quickly adapt to market changes, making AI a powerful tool for increasing the effectiveness of advertising campaigns and achieving better results.

5. Ethical and Technical Challenges in AI-Driven Advertising:

1. **Data Privacy:** Advertisers must ensure transparency and ethics in the collection and use of consumer data, respect privacy rights, and provide clear opt-out options. Balancing the benefits of retaining personal information for advertisers while avoiding potential negative repercussions requires a clearer understanding of consumer perceptions of privacy and the expected use of personal information (63). Despite its practical application, using AI to collect and analyze detailed consumer insights can invade their personal lives and privacy. Consequently, Rodgers and Nguyen developed algorithms for smart advertising by establishing the TPM model, which consists of algorithmic pathways that ethically and unbiasedly evaluate online consumer purchases and consistently provide guaranteed alternatives (64).
2. **Consumer Manipulation:** AI raises ethical concerns about the authenticity and honesty of ad designs. AI-generated content must be truthful and transparent, avoiding deceptive practices that could harm consumer trust (65).
3. **Bias and Representation:** Machine bias refers to the programming biases present due to its creators or the data used. Information that is unfairly conveyed or discriminated against through machine bias can have harmful effects on people's lives (66). Artificial intelligence algorithms learn from existing data, which may contain biases and limitations. If the data used to train the AI contains biased information, it may result in biased advertisement designs that perpetuate stereotypes based on discrimination and lack of representation in advertisements. Therefore, advertisers must be mindful of potential biases and ensure that AI algorithms used in creating advertisements are trained on diverse and representative data to avoid reinforcing harmful biases (67).
4. **High Costs:** Developing AI systems that mimic human intelligence is complex and resource-intensive, requiring significant investment (68).
5. **Lack of Human Touch:** Although AI technologies can automate the process of creating advertisements, they may still require the human touch and emotional intelligence that human designers bring to the table. Human designers often consider subjective factors such as emotions, subtle cultural differences, and creative instincts, which AI may not fully replicate. Therefore, advertisers should balance using generative AI for efficiency and creativity while involving human designers in the creative process to add the human touch (69).
6. **Creativity Limitation:** Despite numerous attempts, AI is still unable to be truly creative, as machine learning algorithms do not have the capability to analyze data in the same way the human element does (70). Consequently, AI's ability to independently create an effective advertising message based on those ideas remains very limited and unoriginal. Thus, the debate continues on whether AI can produce creative assets better than human creative talents. Advertisers should not expect robots to write and learn cultural codes, values, aesthetics, or humor, nor to replace human copywriters with them (71).

Conclusion:

In conclusion, advertising techniques have evolved significantly from traditional methods like newspapers and TV to modern tools such as the internet and social media, culminating in the extensive use of artificial intelligence. Each phase brought advantages and challenges, profoundly

impacting how advertisers communicate with their target audiences. Traditional advertising relied heavily on mass reach but had limited interactivity and precise measurement of impact. With modern technology, companies can target audiences more accurately and analyze the effectiveness of their campaigns comprehensively. Today, AI has revolutionized advertising design and performance by analyzing vast data sets, predicting consumer behavior, and personalizing ads to individual preferences. Despite challenges related to privacy and data security, AI offers enormous potential for improving ad quality and performance. Continuous innovation and leveraging AI's capabilities will ensure that advertising remains a core part of successful marketing strategies, enhancing audience engagement and achieving advertising goals more effectively and precisely.

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