

## Generative AI and its Implications for Modern Marketing: Analyzing Potential Challenges and Opportunities

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### Abstract

As the era of ChatGPT and generative AI technologies unfolds, the marketing industry stands on the precipice of a paradigm shift. Innovations such as GPT-4, DALL-E 2, and Mid-journey Stable Diffusion possess the capacity to dramatically transform the methods by which advertisers reach and engage with customers. The potential applications of these advanced tools herald a new age for the marketing and advertising sectors, offering unprecedented opportunities for growth and optimization. Nevertheless, the rapid adoption of generative AI within these industries presents a unique set of challenges, particularly for organizations that lack the necessary technological infrastructure and human capital to effectively leverage these innovations. As a result, a competitive crisis may emerge, exacerbating existing disparities between well-equipped enterprises and their less technologically adept counterparts. In this article, we undertake a comprehensive exploration of the implications of generative AI for the future of marketing, examining both its potential benefits and drawbacks. We consider the possible impact of these developments on the advertising and marketing industries at large, as well as the ways in which professionals operating within these fields may need to adapt to remain competitive in an increasingly AI-driven landscape. By providing a holistic overview of the challenges and opportunities associated with generative AI, this study aims to elucidate the complex dynamics at play in the ongoing evolution of the marketing and advertising sectors.

**Keywords:** generative AI, dark marketing, consumer data, ethics

## Generative AI is coming very soon and what is it going to mean for the advertising and marketing industry

For multi-modality information, which includes not only text but also images and video, the Generative AI uses advanced algorithms to learn patterns in the content and generates new output based on that learning. It uses deep (specialized) learning techniques such as neural networks to analyze massive amount of data and generate new content that is similar to the input data. Also, it can generate optimal articles, images and more

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by using a few keywords or specific commands. For example, using a literature-based evaluation, Haleem et al. (2022) identified several areas for implementation of AI in marketing, such as connecting the business process, digital marketing, reduction of human mistakes, analysis of massive amounts of market data, delivering more relevant information to clients, enabling convenient customer support, better marketing automation tool, ease workload and speed up data processing, making customer-oriented choices, examining consumer data, improve stock control, customize shopping processes, target audiences, identify and anticipate trends in digital advertising, develop predictive models, improve customer experience and satisfaction to increase revenue, optimize ad spending and overall, assist businesses. In this context, as generative AI has already entered the marketing and advertising sphere, and we are going to summarize below the benefits and concerns that came with it.

### Hypertargeting and personalization

The most important opportunity offered by Generative AI is the ability to create hyper-personalized ad campaigns. The algorithms powered by AI analyze huge amounts of customer data, which allows marketers to target individual consumers precisely with personalized ad content and offers. Reinforcement learning will allow AI to recognize consumer problems throughout the potential customer journey, and act to solve them by presenting the right ads and achieving the goal of conversion. With this level of hyper-customization to increase customer engagement, improve conversion rates, and ultimately, create sustained advertiser revenue growth. AI-based hypertargeting and personalization has become one of the marketers' preferred strategies. One system that has been used frequently is the so called 'visual recognition software' which helps marketers achieve a deeper analysis and comprehension of the customers they are trying to reach. But how does the 'visual recognition software' work? It makes use of the social media posts that that person shares, likes, etc. and through this content one can see the type of products that current customer or future possible customer may be interested in (Micu et al., 2021).



**Figure 1. Marketing illustration using the reinforcement learning in generative AI**

### Generative AI to act as a mass producer of AD/PR content

Generative AI can create contents that go from blog articles to social media posts and ad copy. With this technology, marketers will be able to quickly produce high-quality and relevant content on a large scale. By automating content creation, marketing departments can free up time and resources for strategy and execution. On the other hand, the lack of transparency and data privacy concerns by using Generative AI can undermine

public trust and confidence in AI-powered (AI-lead) advertising/PR. Moreover, special measures will be needed to develop marketers' Search Engine Optimization (SEO) strategies as low-quality information generated by generative AI will overshadow quality information and dominate the amount of information searched on leading search engines such as Google. One clear example of how AI is used nowadays for content creation in marketing is BuzzFeed, known for being an extremely content-driven site. But how does BuzzFeed use AI to create its content? AI can be found in every step of the creative process. For example, with AI we can know the possibilities of a certain content to have more success than others, what people want to see more and even automatize the "routine aspects of publication such as keyword selection, categorization and personalization" (Forbes, 2023). BuzzFeed uses this artificial intelligence to make each piece of content relatable and interesting to its audience, giving special attention to the use of interaction.

### **Enhanced customer experience with real-time data**

As AI-powered chatbots and virtual communications become increasingly more sophisticated, companies will be able to provide personalized customer support and engagement 24 hours a day. Generative AI, along with text or image-based search in online stores has the potential to revolutionize the traditional e-commerce paradigm. These AI tools are expected to significantly improve the customer experience by providing real-time, accurate responses to customer requests, increasing not only convenience but also loyalty and trust in the organization. In this way, the focus should be on the use of AI in the customer service sector. Even if people argue that AI is reducing the number of jobs that humans can do, AI is supposed to be used to make the customer experience better, make it easier and make it more convenient for customer service agents to reply to customers' inquiries. For example, AI would be used to reply to basic and generic questions, and then, when an agent is needed, it would be in charge of connecting the customer with the right customer service agent (Forbes, 2023). Moreover, just relying on generative AI cannot reflect the nuance of a brand's identity and personality, make cultural decisions or consider principles of diversity, which are crucial components in the brand's commercial and community objectives. For example, stitching together an authentic storytelling narrative and using emotions to elicit desired consumer responses are distinct human activities which a machine cannot perform (Kantar, 2023).

However, generative AI can help start-ups, small companies, single entrepreneurs and non-profit organizations to gain the ability of developing personalized communications for fundraising, crowdsourcing or designing sales materials for specific customers (Peres et al., 2023). Vanian (2023) pointed out that companies should not just rely on the technology to figure out what content resonates with different audiences or how to execute major campaigns across multiple platforms, as this could aggravate the already existing gap in understanding between businesses and customers.

### **Legal and ethical issues related to generative AI**

The growing use of generative AI in marketing is raising ethical concerns and businesses are facing several challenges in its implementation. To begin with, there is a wide range of issues surrounding consumer data privacy, the production of negative/hateful content due to algorithmic bias, the potential for AI to inadvertently spread misinformation, and the creation of copyrighted works that must be addressed. There are also concerns about the intentional use of generative AI in combination with ad-fraud and brand-unsafe content, which could lead to more sophisticated criminal behavior. Wang et al. (2023) identified three stages of online black/ shadow industries, such as the upstream stage that focuses on the collection of various types of personal information and registration of accounts on different platforms, the midstream stage which focuses on advertising to attract

potential victims on illegal accounts or websites, so that private accounts will be used as advertising content, and the downstream stage that involves the implementation of specific illegal activities for profit.

In digital commerce, consumers are often manipulated into various forms of marketing deception to make choices that go against their own interests as service users. This phenomenon is known as "dark marketing", and mainly exploits the digital interface of online websites or mobile apps to deceive users, or even to engage them in unwanted commerce through bait advertisements, which are not relevant to the consumer's context. Dark marketing operates by manipulating consumer's judgment by obscuring or distorting the attributes of a product or service. On the other hand, advertising frauds refer to the act of making a false claim to an advertiser for advertising effects or services to obtain financial benefits. For example, "voice phishing", a compound word that means "fishing for private data", is a method of deceiving consumers through phone calls or chat to obtain financial gain. Dark marketing, advertising fraud, and voice phishing may seem unrelated at first glance, but they are the same in that they are subtle techniques that exploit consumers' information asymmetry and psychological vulnerability. In other words, all of these are illegal acts to gain unethical benefits by misleading or confusing consumers in the advertising and marketing fields. Advertising fraud can also be understood as consumer deception in that it manipulates consumer advertising participation information (e.g., consumer clicks, exposure, sharing, etc.) to claim illegal advertising expenses from advertisers. Because these illegal activities betray consumer trust and distort consumers' purchasing decisions, consumers lose trust in advertisements or marketing messages, which eventually hinders the smooth function of the market.

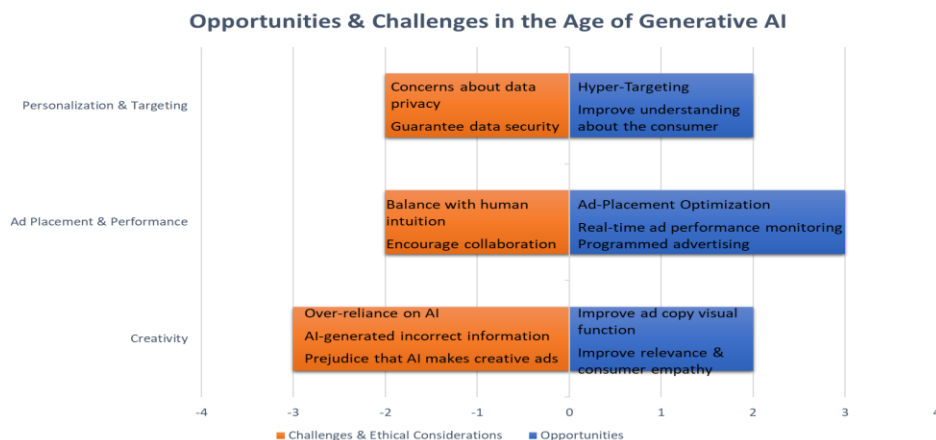
Recently, a new type of dark marketing involves deceptive and false advertisements produced in real time using generative artificial intelligence. Advertisers can optimize advertising effectiveness by creating customized advertisements (images or videos) that are generated on the spot by AI systems. However, this powerful consumer-tailored optimization feature makes it easy to execute dark marketing that can easily mislead consumers. Furthermore, "confirm shaming", which is expressed in a way that induces guilt for refusing a service, and 'roach motels' which make it easy for users to sign up for a particular service but very difficult to cancel, are representative marketing dark patterns. Furthermore, dark marketing has a broad impact on consumer (or voter) decision-making, undermining the trust between businesses and consumers, brand reputation, ultimately causing financial and emotional harm to consumers.

Another example is Amazon's dark marketing, which aims to get users to sign up for Prime membership. This consists of a series of images during the checkout process, with a 'Continue' button visually highlighted in color and shape which leads the user to believe that they are proceeding with a purchase, but actually are signing up for a Prime membership. This difficulty to cancel Amazon Prime membership encourages consumer abandonment. In a voluntary response to these issues, Google announced in 2020 that it would ban marketing in its Chrome browser that uses deceptive methods to trick consumers into subscribing to services or purchasing unintended products. These self-purification efforts appear to be a positive sign for the digital marketing industry, but regulations from the industry are needed to ensure more consistent ethical standards.

In the context of generative artificial intelligence, biases resulted from the data training are another issue of concern, therefore applications based on this technology should be evaluated by a diverse group of users and experts and transparency in the communication with customers should be emphasized (Nah et al., 2023). Therefore, marketing departments will need to consider several factors when implementing AI-powered communication strategies, to maintain consumer trust and avoid the legal and ethical issues mentioned above. While government and industry responses are important, media companies also have a responsibility to prevent dark marketing on their platforms. Companies should remove dark patterns from their media platforms and provide customers with a more transparent, fair digital environment. In addition, businesses need to provide

customer and employee education, and awareness-raising about dark patterns. Furthermore, to increase digital platform transparency, companies should provide clear information to customers and disclose hidden costs or terms, so they can understand more information and make informed decisions. Similarly, Korzynski et al. (2023) suggested that in addition to generating new ideas, at the strategic level generative AI can assist with data collection and analysis that can enable entrepreneurs to make better judgments and identify consumer perceptions based on using more data and educated reasoning. Ultimately, clear rules are needed on the sharing and use of consumer data, and customers should be given control over how they manage their own data.

In terms of copyright, Campbell et al. (2022) pointed out that generative AI-manipulated ads force brands to find new ways to authenticate or create advertisements that are difficult to copy or edit, ultimately leading to increased digital security costs. Moreover, brands will tend to swap out the feature product for their own while retaining the other non-brand-specific elements of the ad to prevent others from copying the ad elements and implement visual cryptography methods.



**Figure 2. Opportunities and challenges for the advertising and marketing industry in the age of generative AI**

As concerns over dark marketing are growing, the government announced regulations for online personalized advertising in July 2023. However, these regulations have raised concerns in the Internet industry, including the Korea Internet Business Association, that the move could pose a significant threat to small and medium-sized advertising businesses, potentially putting them out of personalized advertising. Specifically, the “Online Personalized Advertising Behavior Information Processing Guidelines” presented by the Personal Information Protection Commission requires users to repeatedly select whether to consent to personalized advertisements every time they access a website, which poses a significant technical and management burden on small and medium advertising companies.

### **In the age of generative AI, which marketers can be hired and what skills should be developed?**

Currently, big companies and major ad agencies are using generative AI mostly for pilot projects, while waiting for the technology to develop (Vanian, 2023). The generative AI revolution will require marketers to proactively hire the right talent and develop new skill sets in their existing workforce to stay competitive in the field. On the one hand, there are concerns that over-reliance on AI-based marketing will lead to a decline

in the capabilities of departments and a decline in the production quality of the entire industry. Essential skills for marketing professionals and what companies should look for when hiring marketers in the age of generative AI. The essential skills a marketing professional should have, and the traits companies should look for when hiring marketers in the age of generative AI are summarized below. Mayahi & Vidrih (2022) argued that AI will be a revolutionary tool and a major driver in the creation of design software which will boost visual marketing, but only when artificial intelligence is viewed as a complement to human resources, not a replacement.

### **Ability to analyze and interpret consumer data**

Data is the key fuel to strengthening AI-based marketing strategy. According to Roetzer & Kaput (2022), the most important element of machine learning which differentiates it from traditional marketing statistics and computer science is that it continues to improve based on new data, which has major implications for every area of marketing that uses data such as analytics, automation, advertising, content, email, sales, search, social and websites. Marketers must be adept at analyzing and interpreting data to make large, informed decisions. Given the possibility of errors in data analyzed and interpreted by AI, marketers' judgment in handling data is more important than ever. Companies will need to prioritize hiring professionals with a foundation in data analytics using generative AI, along with proficiency in traditional tools like Google Analytics, Tableau, and Excel. Microsoft has developed two features and one of them, called "Co-pilot" is based on comparing documents across the different platforms used and summarize and edit the content (Murphy, CNN, 2023). Moreover, it is believed that in 2023, we will see a focus on unstructured data, which businesses did not pay that much attention to as they did to more accessible data. In this way, thanks to the use of AI, customer information is can be taken from PDFs, scans, handwritten notes, etc. (Harald, Forbes, 2023).

### **Marketing creativity and critical thinking skills**

AI can generate content and analyze data, but creativity and critical thinking are still essential human skills. Generative AI will not be able to replace human copywriters or designers. However, the level of creation will rise significantly when generative AI is used as an inspirational springboard for ad creation. Marketers will need to develop the ability to create compelling brand stories, break stereotypes, and devise innovative solutions to marketing problems. Furthermore, Lai & Yu (2021) suggested expanding the application of generative AI to "situational" advertising, to facilitate an authentic, interactive, and immersive entertainment experience of the customer. Moreover, generative AI solutions can also assist marketers to forecast trends, improve search engine optimization (SEO) techniques by identifying proper keywords, as well as prevent the company from overspending on digital advertising (Haleem et al., 2022, Dumitriu & Popescu, 2020). Overall, the implementation of generative AI by marketers will ensure a better performance in targeting, positioning, and identifying end-customer needs (Haleem et al., 2022, Kowalczyk, et al., 2023). When hiring marketers, companies will need to look for candidates with innate creativity as well as their AI application skills to synthesize information from multiple AI sources.

### **AI-related technical expertise and AI literacy**

Since AI technologies become more prevalent, marketers need to develop the skills to use these tools effectively. Knowledge of machine learning, natural language processing, and coding languages like Python or R could be a basic asset. Companies will need to hire marketers with technical backgrounds or provide

learning opportunities to build AI literacy so that existing team members can acquire these skills and at least have the ability to interpret them. To boost marketers' SEO efforts, Akyüz & Mavnacıoğlu (2021) proposed several areas for implementation of generative AI and Machine Learning (ML), such as website performance analysis, insight about competitors, SERP performance, Search Engine Optimization spend management, intent reports of customers and pay-per-click spend management. In this context, Haleem et al. (2022) pointed out that data standardization, cleansing and maintenance are crucial in the process of implementing generative AI, as algorithms can make judgments that harm marketing initiatives.

To counter dark marketing, a strong ethical framework and increasing consumer advertising literacy are needed. This means educating consumers about the concepts and practices of dark marketing and building the literacy skills to properly identify and avoid these deceptive manipulations. A strong ethical framework for advertising builds consumer trust and a fair competitive environment, allowing companies to focus on the quality of their products or services. Additionally, increasing consumers' advertising literacy helps consumers recognize and avoid dark marketing, which enables companies to increase brand reputation and customer loyalty.

Yet another key area of AI improvement for businesses' technical expertise is software security. As marketers greatly rely on various software for design, planning and data analysis, generative AI could point out security flaws in these programs and ensure data transparency and security (Haleem et al., 2022), by applying specific features such as real-time inspection, defect detection for custom designs, correctness, safety and security criteria of AI-generated source code (Tihanyi et al., 2023). As marketers deal with security issues in the services they deliver to their customers, not only does this decrease the risk of dark marketing practices and protect brand reputation, but also boost technical expertise that match the challenges in the current digital marketing environment.

### **Ability to draw consumer insights and empathetic emotional intelligence**

Understanding consumer emotions and motivations is crucial to creating marketing campaigns that resonate with consumers. Marketers can gain insight about how customers feel about their brands, especially on social media, and use this data in real-time to quickly improve messaging or branding for maximum effectiveness (Haleem et al., 2022). For example, Dharmaputra et al. (2021) found that consumers' perceived ease of use and usefulness of AI marketing on Instagram had a significant positive impact on convenience and company's cost minimization. However, even when generative AI creates better consumer personalization, marketers still need to have the ability to create content that resonates with customers and is emotionally engaging. In fact, Prentice et al. (2020) showed that AI can act like a buffer in employee performance and can complement human tasks such as emotional labor, rather than replace them. Therefore, companies should prioritize hiring marketers with high emotional intelligence who can empathize with consumers and that have the ability to understand how consumer behavior is changing.

### **A continuous growth mindset in the AI ecosystem**

The rapid pace of technological advancement requires marketers to be able to adapt and commit to continuous learning. As generative AI continues to evolve, marketing professionals will need to be prepared to learn about the industry's latest information and about technology advancements and adjust their strategies according to these. Companies should look for workers with a growth mindset and a passion for learning new skills. According to a McKinsey & Co. analysis (Deveau et al., 2023), the companies that will gain the most from

generative AI will be those which deliver hyper-personalization, such as individualized messages based on user's needs, profile, behaviors, and interactions, or go beyond account-based marketing and use advanced algorithms to leverage patterns in customer and market data to segment and target relevant audiences. Moreover, businesses can use dynamic customer-journey mapping to identify critical touchpoints and prompt customer engagement.

### Cross-domain collaboration and multi-teamwork

Before implementing guidelines and regulations to respond to dark marketing, it is necessary to collect opinions from relevant stakeholders and to conduct an analysis of the changing advertising market environment and research on the ripple effect that these guidelines will have on the overall economic growth. As the landscape of digital marketing continues to evolve, it is important to balance the need to protect consumers with the need to promote innovation and economic growth. There is a need for strategies to respond to various deceptive advertising and marketing behaviors that are rapidly evolving through generative artificial intelligence. Furthermore, the participation of industry consultative bodies and media/ law/ advertising experts is required to develop and maintain effective ethical standards. This comprehensive and preventive approach will enable governments, industries and consumers to ensure a more ethical and sustainable marketing ecosystem.

Moreover, cross-discipline collaboration between marketing professionals, data scientists, and engineers is becoming increasingly important in an AI-driven marketing environment. In one study, Fredstrom et al. (2022) showed that collaboration and partnership for introducing AI and ML technologies in marketing efforts improve market sentiment and lead to higher business performance. Marketing will need to be able to work effectively across departments while promoting a culture of open communication and knowledge sharing. Walls between areas of expertise will need to be broken down and companies will need to hire people with a proven track record of successful collaboration and the ability to work in diverse collaborative environments. Not to mention the need to adapt to the flexibility to work from home and offsite in a post-COVID-19 world where non-face to face is the norm.

**Table 1. Workforce needs and jobs in advertising and marketing in the era of generative AI**

Example of workers needed in advertising/ marketing areas	Example of detailed tasks by required staff
Consumer data scientists, machine learning engineers, AI marketing programmers	AI-powered content creation, data analysis, and derive insight
Brand story writers, editors, video producers, graphic designers, social media managers	AI-powered content creation tasks
AI-powered SEO specialists, PPC managers, email marketers, web developers, and analytics experts	Digital marketing and online advertising
PR strategists, corporate crisis managers, media relations specialists, reputation managers	Crisis management and reputation management
Ethical experts, compliance officers, legal professionals, and data privacy experts	Ethical and transparent use of AI

As summarized in Table 1, professionals from various fields such education, media and PR, data analytics, graphic design or ethics will be needed in order to fully exploit the potential of generative AI-driven marketing. For example, consumer data analysts, machine learning engineers and AI marketing programmers will be able to create AI-powered content and boost their data analysis insight. Moreover, creative experts such as brand



story writers, graphics designers and social media managers will make use of generative AI for content creation, while SEO specialists, email marketers or web analytics experts can expand their digital marketing strategies. On the other hand, generative AI will assist corporate crisis managers, PR and reputation specialists in improving their techniques in crisis and brand reputation management. Finally, ethical experts, legal professionals and data privacy experts will need to ensure that generative AI use is both transparent and ethical.

### **Those who rise to the challenge of generative AI will lead the way**

Moving beyond “computing like human” intelligence to “thinking like human” intelligence, technology innovation is accelerating. The pace of innovation in technology is accelerating to enable intelligence that thinks like humans. The evolution of generative AI will undoubtedly present both challenges and opportunities for marketing departments. By using the incredible power of AI for personalization, content creation, and customer experience, businesses will be able to drive growth and stay ahead of the competition. Companies will need to focus on hiring and developing talent with these core competencies to build forward-thinking marketing teams that can use the potential of generative AI and drive sustainable growth. Nah et al. (2023) suggested several directions of development by comparing the advancements in content generation automation and the industrial revolution, for example increasing requirement for employees to embrace generative AI to achieve higher productivity, develop innovative business models such as personalized AIGC to tailor content to the specific needs and preferences of individual consumers, and the shift in online social network structure as algorithms become important nodes in the communication network. Moreover, Xu et al. (2023) pointed out the need to implement a digital policy framework that addresses needs, orientation, and dimensions for sustainable transformation of digital innovation, by improving R&D governance, collaborative promotion, standardizing management and digital security. In addition, to respond to various legal and ethical issues related to generative AI, both companies and government agencies will need to advance relevant policies to ensure the healthy growth of the industry while protecting consumer rights and interests.

### **Concluding thoughts**

Far from replacing human specialists in the marketing field, the implementation of generative AI will increase the need for cross-field collaboration and raise challenges and opportunities in marketers’ work in terms of content creation, customer experience personalization and ethical or privacy issues, which businesses will have to successfully tackle in order to stay ahead of the competition.

In terms of marketing creativity, the potential of generative AI will inspire ad creation through compelling brand stories, preventing stereotypes, and providing innovative solutions to marketing problems. Especially, web content managers such as SEO, social media and analytics specialists can expand their digital marketing strategies and gain unprecedented insight into consumer trends that will benefit all stakeholders.

Moreover, by understanding consumer emotions and motivations, marketers will be able to create campaigns that resonate with actual consumer needs and motivations. Most importantly, generative AI technology will enable businesses to better empathize with their clients and understand changes in consumer behavior, in order to make make substantial and informed decisions.

The input of relevant stakeholders and cross-discipline collaboration between marketing professionals, data scientists and engineers, will be crucial for businesses to boost their areas of expertise and diversify their collaborative spectrum in the AI-driven marketing environment. This will also call on a commitment to continuous learning and improvement of both soft and hard skills. As generative AI continues to evolve,

marketing professionals will need to keep up with technology advancements and adjust their strategies according to these factors.

In addition to these changes and opportunities, the growing use of generative AI in marketing is also raising ethical questions. From consumer data privacy to negative content produced by algorithmic bias, copyright issues and the potential spread of misinformation, marketers need to set a strong ethical framework and increase consumer advertising literacy, so that customers are given control over their own data and prevent the deceptive manipulations of dark marketing. Likewise, training staff for expertise in AI literacy and security issues will enable companies to ensure a reliable marketing environment and boost brand reputation and customer loyalty.

To successfully transition into the new era AI-powered digital marketing, organizations will need to carefully address the changing role of the marketing department to truly benefit from the creative potential of generative AI, and ensure a safe and trustworthy environment for consumers by considering the legal and ethical considerations that come with these changes.

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