Research Article

Construction and Risk Analysis of Marketing System Based on AI

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AI technology is rapidly changing traditional industries by using the technologies of big data, machine learning, and deep learning in AI technology. This study transforms and constructs the links of market research, market strategy, marketing strategy, and marketing activities in the marketing system. The use of AI can help companies to understand customer needs more comprehensively, find market opportunities more quickly, establish business goals more accurately, and achieve smart marketing and precision marketing in the true sense. AI technology also brings new challenges to the development of enterprises. This study analyzes the data risk, payment risk, ethical risk, and decision-making risk in the marketing system and puts forward the solutions.

1. Introduction

With the rapid development of science and technology, the knowledge economy system has gradually taken shape. The emerging high-tech industry represented by AI (Artificial Intelligence), as a powerful engine to stimulate social development, is imperceptibly affecting people’s production and lifestyle [1, 2]. AI, a part of computer science, actually attempts to create a new type of intelligent machine. Such machines can respond to external stimuli like real humans. Large domestic and foreign Internet companies and venture capital institutions have set their sights on this industry [3].

In recent years, AI technology has developed rapidly with the strong support of national policies. AI is a technology that studies and develops to simulate, extend, and expand human intelligence, including big data, machine learning, deep learning, natural language understanding, image recognition[4, 5]. In case many traditional industries still do not use AI technology to improve the level of intelligence and complete the upgrading of the traditional system, they might be replaced by AI in the future.

Marketing is a very important link in traditional economic life, mainly around customers. At present, the global economy is in a period of decline, and business operations are facing great difficulties. How to expand the scale of operations and reduce operating costs have become important issues for enterprises to consider [6]. The use of AI can help enterprises to more comprehensively understand customer needs and find market opportunities more quickly. To establish business objectives more accurately, it is very necessary to study the application prospects of AI technology in marketing. This study uses AI technology to discuss the methods of transforming and constructing the traditional marketing system, analyzes and studies the possible risks of AI, and puts forward the solutions at the end.

2. Relevant Overview and Application of AI in Marketing

2.1. AI. AI is one of the most emerging fields of science and engineering. It was proposed by scientists such as McCarthy, Minsky, Rochester, and Shennong at the Dartmouth conference in 1956 [7]. In the subsequent development, different scholars have given different definitions of four different dimensions: human-like thinking, human-like action, rational thinking, and rational action. The relevant definitions are shown in Table 1.

Combining the viewpoints of different scholars, AI belongs to a branch of computer science. It is a technology to study and develop theories, methods, technologies, and application systems for simulating, extending, and expanding human intelligence. It tries to understand the
nature of intelligence, imitates human intelligence, and produces machines that are similar to human intelligence.

In other words, AI is a technical science that studies human thinking patterns and applies human thinking to machines, so that machines have human thoughts and behaviors, thereby replacing humans to complete certain tasks. As a new technical science, AI is different from general computer code programming. Its core idea is to use specific algorithms to judge and summarize events, so as to quickly complete the predetermined settings and operations [8]. This is inseparable from a large amount of data analysis, deductive inference, and calculation. After more than 60 years of development, AI has become an interdisciplinary frontier science covering multiple fields and multiple disciplines.

2.2. Marketing. Marketing is an activity or action. As for the concept of marketing, Philip Kotler believes that marketing is the management process of exchanging the products produced by individuals or organizations with others, so as to meet people’s practical needs [9].

The American Marketing Association proposed that marketing is an activity process of disseminating valuable market supply. In fact, it is the process of realizing a function and a series of creation and communication, and then influencing this value on customers and realizing profits in this process. Many experts and scholars have defined marketing and have their own views.

In short, the market is a starting point and a destination in commodity marketing activities. In fact, marketing is not only a function but also a way to create, communicate, and deliver customer value to realize self-interest. Products can be delivered to consumers and partners through marketing. Marketing is not only an activity but also a process of sales behavior and art of creating and meeting customers.

2.3. Intelligent Marketing

2.3.1. Connotation of Intelligent Marketing. The traditional marketing model is crafted mainly through apps and offline and online advertising, or local promotion through bank outlets. These methods have the characteristics of high cost and low efficiency. Intelligent marketing uses AI technology to obtain customers through multi-dimensional online and offline intelligence and makes intelligent analyses based on big data information processing technology [10].

You can see the product needs of customers through user portraits, so as to achieve an accurate match between products and customer needs. This method greatly improves the efficiency and reduces the cost. It can not only improve customer satisfaction with products but also indirectly enhance the market competitiveness of banks, as shown in Table 2.

Intelligent marketing is mainly divided into two steps. The first step is personalized recommendation and intelligent customer acquisition. In order to attract customers, customer groups are divided according to customers’ different consumption preferences. The second step is differentiated classification and precision marketing to develop differentiated marketing strategies for different products and different customers to achieve personalized precision marketing.

Personalized recommendations and intelligent customer acquisition are based on multi-channel data. Using big data, AI, and other technologies to deeply mine the relevant information of customers in multiple dimensions, analyze the daily behavior characteristics of customers, accurately identify customer needs, and achieve accurate portraits of customers. Differentiated classification and precision marketing are precision marketing after mining customers and screening customer needs through AI [11]. Formulate differentiated marketing strategies for different customer groups, personalize products to meet their needs, save marketing costs, improve marketing efficiency, and improve customer experience.

2.3.2. Technical Foundation of Intelligent Marketing. The rise of AI marketing is inseparable from the support of technology. According to the research of previous literature, the technical basis of the development of AI marketing can be roughly divided into three aspects:

(1) Mobile Internet and 5g technology provide the guarantee of massive data sources for the development of intelligent marketing. The important foundation of intelligent marketing development is data. Continuous and reliable data acquisition is one of the core technologies required by intelligent marketing. With the development of mobile Internet and 5G technology, marketing activities have widely penetrated consumers’ daily behaviors such as work, entertainment, life, and consumption with the help of virtual reality technology, simulation technology, and artificial bio-intelligence technology, and comprehensively recorded consumers [12, 13]. The behavior data provided by intelligent marketing provides a massive source of data information for the

| Dimension          | Definitions                                                                 | Representative scholar |
|--------------------|-----------------------------------------------------------------------------|------------------------|
| Human-like thinking| AI has spontaneous behaviors related to human thinking and activities, such as decision-making, problem-solving, and learning. | Richard Bellman        |
| Humanoid action    | AI is the art of creating machines that enable them to exhibit human-like intelligence. | Ray Kurzweil           |
| Rational thinking  | AI is a subject that studies how to make computers perceive, reason, and act.  | Patrick Winston        |
| Rational action    | AI is concerned with the intelligent behavior in artificial products.         | Nils Nilsson           |

Table 1: Definitions of AI in four dimensions.
In short, each product is marketed to corresponding user groups in a targeted manner.

2.4. Problems of the Traditional Marketing Model

2.4.1. Marketing Effect Is Not Ideal. In short, each product has a relative consumer group. However, the traditional marketing model only focuses on the promotion of products and providing corresponding services to consumers, and does not carry out personalized marketing for specific consumer groups. With the development of the times, it only chooses the traditional marketing model. That is, it cannot be promoted to the corresponding consumers according to the special properties of the product and the corresponding scope of application. It will lead to the retention of a large number of products and seriously affect the development of the enterprise itself. Therefore, in the current social development process, enterprises should promote products according to their own scope of use and unique attributes of products, and recommend products to corresponding audience groups in a targeted manner.

2.4.2. The Pattern Is Monotonous and Not Rich. Most of the traditional marketing models carry out product promotion and marketing through traditional media such as newspapers, TV, and magazines. However, these traditional marketing methods are relatively single and cannot cover all consumer groups. Information sources of current consumer groups are not limited to newspapers, TV, and magazines, and most consumer groups are doing shopping on the Internet environment. Therefore, if only the traditional marketing model is adopted, the long-term development of the enterprise itself cannot be promoted.

2.4.3. Traditional Marketing Costs Are Too High. Cost consumption is a very important factor in the production and marketing process of enterprises. In the process of using the traditional marketing model to promote product brands, there are many promotion processes and links, which further increases the cost of consumption. In the traditional marketing model, the communication between enterprise sales staff and consumers is prone to problems [15]. If the enterprise does not take corresponding adjustment measures, it will greatly increase the marketing cost of the enterprise, and even seriously affect the actual marketing effect of the enterprise’s own brand products. In a word, in the marketing process of enterprise products, the relationship between cost and output is the biggest influencing factor.

2.5. Application of AI in Marketing

2.5.1. Marketing Characteristics of AI

(1) Cross Time and Space Marketing. Using the marketing method of AI, we can quickly obtain all the information of network users, who come from all over the country and even the world. AI can accurately screen their daily browsing records and push them with marketing information in line with users’ preferences. This was something that could not be done in the past. The previous marketing was only manual marketing for the local area and a small area. Now, the use of AI can expand the scope of marketing to the whole country and even the world, so that more people can see the marketing copy and advertisements of enterprises.

(2) Multimedia Marketing. Now is an era of rapid technological development, and people can obtain information in various forms on the Internet. The use of AI for marketing is...
in line with this characteristic. AI can convert the marketing scheme into various forms and appear on the user’s push page. Users can use the network to further understand the products in various forms such as video, pictures, and text [16]. The characteristics of multimedia can enable AI to accurately understand the effect of marketing and collect the reactions of various users when they see advertisements and the reading volume of advertisements. It makes it easier to determine the customer group, and it can also better accumulate the experience for the future marketing of the enterprise.

(3) **Growth.** A very big benefit of using AI is that marketing can be kept growing. Most of the people who use smart products and the Internet are teenagers and middle-aged people. Middle-aged people now have enough economic strength, so their purchasing power is also very strong. Although teenagers have insufficient purchasing power now, marketing to their group can effectively cultivate potential customers for the future market. Therefore, using AI for marketing is a growing marketing method.

(4) **Interactive Quality.** The progress of traditional offline marketing is very slow, and the interaction is also very poor. Most users are office workers and they do not have time to specifically evaluate the marketing effect. With the use of AI marketing methods, it is possible to conduct surveys on marketing objects through the release of questionnaires on online platforms. Or you can put forward some suggestions for improvement, and constantly enrich the content of AI marketing so that they can better meet the needs of users and achieve the purpose of marketing.

(5) **Homnization.** Nowadays, many young people are reluctant to communicate with people directly, they like an independent life, and AI marketing is very suitable for users’ needs. Users can learn the detailed introduction of the product through online marketing, and they can also communicate with the product and customer service through the online platform, and make purchases according to their own wishes. The offline marketing methods are somewhat forced marketing. It is possible that users do not need this product. Forced marketing will make them feel oppressed and have a bad impression of the product.

2.5.2. **Application Status.** With the popularity of the Internet, using computers and mobile phones to browse websites or application software is also known as a basic activity in people’s daily life. During browsing the web, people often find that advertisements pop up, which is actually the “precision positioning marketing” of intelligent marketing. Based on the big data system and combined with the consumer behavior data provided by the demand-side platform, merchants can accurately grasp consumer preferences and demand information, so as to place advertisements in a targeted manner.

The application of AI in marketing can be summarized from the development history, logic principles, and practical effects of platforms such as demand-side platforms (DSP), data management platforms (DMP), real-time bidding (RTB), supply-side platforms (SSP), and other platforms [17].

In the first stage, thanks to the acquisition of consumer behavior data, precision marketing has achieved good marketing results in a short period of time. In addition to the lack of consumer information protection in China, intelligent precision marketing can obtain a large amount of consumer behavior data and preference data—and DSP, DMP, RTB, and other platforms have developed rapidly.

In the second stage, with the cooperation of major e-commerce platforms, major commercial databases have realized technology connection, resource sharing and data exchange, and the breadth and depth of intelligent precision marketing have been better developed.

In the third stage, intelligent precision marketing is widely used by major e-commerce platforms, search engines, and various web pages. Various industries imitate this marketing model, resulting in consumers’ misunderstanding of precision marketing. For example, consumers constantly pop up marketing advertising pages when browsing the web, which affects consumers’ normal life and work and hinders the development of intelligent marketing.

2.5.3. **Existing Problems**

(1) **Lack of AI Talents.** If enterprises want to improve their marketing competitiveness, they must keep up with the pace of social development, pay attention to the application of AI and use the network for more extensive marketing. In the process of application, there may be some problems. The use of AI in marketing is rising in recent years, so the gap between AI talents is very large. Many enterprises lack AI talents and cannot effectively use AI for marketing.

(2) **Improper Management Methods.** Some enterprises use AI to establish platform-related websites, but there is no special management department to manage them, so the role of AI can not be brought into play. Enterprises do not know much about AI, so they should hire professionals to operate and help enterprises carry out effective marketing. Some enterprises will invite professional technicians to operate, but some of them cannot manage well because of a lack of experience and lack of experience in online marketing.

(3) **Lack of Innovation Consciousness.** The use of AI can speed up work efficiency to a great extent. However, due to the low innovation consciousness of enterprises, they do not pay attention to the combination of AI and market demand, and only use AI to put targeted advertising, which will lead to the lack of competitiveness in enterprises and the failure of marketing. Therefore, enterprises should cultivate their
awareness of innovation, use AI to collect information and data, and come up with some novel marketing means.

3. Construction of the Marketing System Based on AI

According to the traditional marketing system, based on the characteristics of market research, market strategy, marketing strategy, marketing activities, and other links, combined with various technical means of AI, a new system diagram based on AI has been established.

3.1. Market Research

3.1.1. Market Environment. Through data mining, data sharing, web crawler, and other technical means, we can more accurately understand and perceive the changes in the market environment. Seize the huge opportunities brought by market demand to enterprises in time to avoid the negative impact on enterprises due to changes in market conditions.

In terms of macro environment, AI can comprehensively analyze the impact of multiple indicators on industrial development, so as to realize the visualization of analysis results [18]. In terms of the perception of the microenvironment, the microenvironment model is established by using the micro marketing channels, enterprises, customers, competitors and other indicators, and through the deep learning algorithm, which can be dynamically observed at any time.

3.1.2. Consumer Behavior. Part of consumer behavioral data can be collected by conducting extensive market research and industry research. More importantly, through cooperation with Taobao, Pinduoduo, and other large e-commerce and offline stores, we can obtain massive consumer consumption data. On this basis, machine learning algorithms and natural language understanding technologies are used to conduct an in-depth analysis of data, accurately understand consumers’ consumption needs, and predict consumers’ future consumption behavior.

3.2. Market Strategy

3.2.1. Market Segmentation. The data mining algorithm is used to comprehensively analyze the consumers in the market, design the prediction algorithm, determine the market segmentation standard, and divide the consumers into several potential customer groups. It overcomes the biggest “expensive” problem of market segmentation without manual intervention. It has the characteristics of low cost and good effect.

The use of AI technology can even achieve complete market segmentation, and each consumer in the market constitutes an independent sub-market. Enterprises produce different products for each consumer according to their different needs, as well as comprehensive standard segmentation, and subdivide the whole market from multiple angles.

If we consider technologies in China, Baidu is one of the most powerful AI companies in China, and it has achieved leaps in many market segments. For example, opening Baidu Maps can realize automatic navigation only through manual dialogue; opening Xiaodu smart speakers can realize intelligent and visual control of all home appliances; and through AI fundus screening all-in-one machine, the diagnosis of ophthalmic diseases can be realized; using EasyDL customization Image recognition tools can be used to identify genuine and fake jadeite, fake and inferior traditional Chinese medicine, etc.

3.2.2. Target Market. On the basis of market segmentation, the deep learning algorithm is used to learn the laws from a large number of market data, identify and judge, determine the target market, and meet the needs of some sub-markets with corresponding products and services. Using the powerful data analysis means of AI, while refining and specializing the products, it can even achieve complete market coverage in theory and maximize the profits of enterprises [19]. Data mining technology has great potential for finding the target market. For example, someone once used the association algorithm in data mining technology to find the accurate relationship between power consumption and consumer products.

3.2.3. Market Positioning. Master the market status of similar products by means of big data analysis, integrate their own product attributes, and determine their unique market positioning. Create a distinctive and distinctive image for enterprise products. Leave a deep impression on customers, occupy their own position in the market, and enhance the vitality and pertinence of products. For example, in the Taobao interface, due to the different historical data consumed by each user and the different interfaces presented, the products sold on Taobao are more targeted and more attractive to consumers. In fact, relying on its technical service advantages in Taobao, Alipay, and Alibaba cloud, Alibaba has deeply integrated AI technology, and has formed an industrial layout in retail, automobile, finance, and other aspects.

3.3. Marketing Strategy

3.3.1. Marketing Mix. Deepen the analysis of marketing data and accurately grasp the market demand through big data algorithms. Through the deep learning algorithm, determine the marketing strategy, realize the marketing strategy combination model, optimize the marketing effect, and realize real precision marketing. For example, Xiaomi company has launched a marketing 1.0 solution based on AI,
including data linkage and media linkage. Through intelligent algorithms, we can have a deeper insight into the needs of users and deliver the right advertisements to accurate users more accurately.

3.3.2. Marketing Budget. The marketing budget is closely related to the company’s production, supply, finance, R&D, etc. Using the data mining technology of AI, it can accurately determine the various resources required by each department to achieve the marketing objectives, and reasonably adjust the marketing budget. This will greatly improve the efficiency of the budget, improve the management level of enterprises, and optimize the input-output ratio of enterprises.

3.3.3. Precise Screening Push. There are many ways of marketing communication, but the push of selected content in the mobile client. The banner advertisements at the end of the tweets on the official account are unique products in this information age, and this is due to the addition of AI.

AI can intelligently analyze big data and mine the potential behavior activities behind these behavior data by recording the behavior of each user. The operation mode of Taobao we commonly use is a typical example. It will make a targeted push for your Taobao home page products according to your search keywords and historical consumption records. This is why when we enter the Taobao interface, we will find that each user’s interface is different.

3.3.4. Online Service. Today, online shopping has become an indispensable part of people’s life, and AI customer service is gradually replacing traditional artificial customer service. AI customer service can collect past customer service consultation records, analyze and summarize the problems mentioned more frequently, and answer most of the doubts for customers in a timely and accurate manner.

On this basis, the intelligent chat system will also extract effective keywords from the messages you launch, analyze the click-through rate and click times of users on relevant products, predict consumers’ preferences, better guess consumers’ real ideas, quickly respond intelligently through natural interaction, and recommend more suitable products faster and more standardized. This approach not only greatly reduces the waiting time of customers, but also greatly improves the sales efficiency and establishes stronger contact with customers.

3.3.5. Customer Follow-Up Management. Customers are the most important resources of enterprises. Making good use of customer autonomy can help enterprises improve their core competitiveness and ultimately greatly improve the company’s profit margin. In the past, in order to improve customer loyalty, enterprises would set up special departments to carry out follow-up management of customers.

In 1999, Inc proposed the concept of Customer Relationship Management (CRM). The goal of CRM is to reduce the cost of the enterprise by improving the business process management of the enterprise in all aspects [20]. If the element of AI is introduced, it will surely attract more new customers while retaining old customers with the advantage of providing faster and more professional services. Such a new type of customer follow-up management mechanism has greatly improved the relationship between customers and enterprises, achieved continuous contribution to customer value, and comprehensively improved the profitability of enterprises.

3.3.6. Marketing After-Sales. After-sales service is an important part of marketing. It is also a means of promotion. Good after-sales service will bring a better reputation to enterprises and brands. Conversely, if major brands want to occupy an advantage in the market for a long time and improve customer stickiness and satisfaction, high-quality after-sales service is an indispensable part, which is mainly divided into after-sales service and after-sales follow-up. Good after-sales service can make customers think they have made the right decision, while high-quality after-sales follow-up can prevent returns and transfer them to other customers.

For example, in the past, small and micro enterprises had insufficient human resources and it was difficult to ensure good after-sales. Large brands continued to occupy the market with resource advantages, resulting in a vicious circle of growing large enterprises and declining small and medium-sized enterprises, and serious market polarization. But now, through the use of AI, this situation will be reversed to a great extent. By mining and optimizing relevant data, it can better meet the different needs of consumers and save material and human resources.

3.4. Marketing Activities

3.4.1. Marketing Plan. When determining a specific marketing plan, through in-depth mining and understanding of market data, the use of AI technology can better and accurately analyze the situation, and clarify the product status, market status, competition status, and macro environment. It can also better predict opportunity risks, assist marketing planners, determine marketing goals, understand financial risks, achieve closed-loop and complete control of the entire marketing plan, and adjust plan deficiencies in a timely manner according to external changes.

3.4.2. Marketing Organization. AI reduces the size of the marketing organization and also enhances the management capabilities of the marketing organization. It can make full use of the wireless, network, and mobile tools, such as mobile apps, WeChat applets, to improve the efficiency of the marketing organization, and realize intelligent management and intelligent presentation in the true sense. At present, the more common software in mobile phones includes Taobao, Pinduoduo, and JD.com. AI algorithms are used without exception. Every consumer’s consumption behavior and consumption records affect the marketing organization behavior of the enterprise and ensure the realization of the marketing effect.
3.4.3. Marketing Control and Execution. Even if companies in the same industry adopt the same marketing strategy, the effects are sometimes quite different. The main reason is that there are differences in the control and execution capabilities of marketing organizations. Through AI technology, every link of marketing activities can be tracked and evaluated to ensure marketing effectiveness. Using big data, algorithms can also clean and standardize data such as annual plans, profitability, and work efficiency, and then mine and present them. Assist managers to improve the efficiency of marketing control and execution.

4. Risk Analysis and Solutions

4.1. Risk Analysis

4.1.1. Data Risk. The integrity and quality of source data will have a great impact on AI algorithms and applications, but objectively speaking, the data standards of marketing are different and the circulation efficiency is very low, which greatly reduces the value of analysis. Data leakage accidents occur frequently and lack effective data supervision, resulting in a grey industrial chain and undermining the fair market environment [3, 21]. Failure to monitor data quality may lead to the decline of enterprise operation efficiency, especially the lack of core data may lead to wrong judgment. Hackers' attacks and modification of data may bring unpredictable risks to the whole system, and in serious cases, it can lead to the collapse of the whole marketing system.

4.1.2. Payment Risk. In marketing activities, online payment is often required. As one of the most popular technologies, biometrics, such as face recognition, has inherent loopholes, which may lead to security failure. At this time, the face is biological information that can be obtained without personnel cooperation. Attackers can obtain photos through social networks, copy facial features, generate dynamic portraits using 3D technology, and train “blink/speak/shake your head” and other contents, which may successfully pass the security system. Intelligent speech technology also has the problems of weak recognition ability and low recognition rate. Hackers can hide malicious instructions in white noise or “dolphin attack” through ultrasound.

4.1.3. Ethical Risk. In the process of marketing, with the continuous progress of AI algorithms, humanoid performance will be more obvious, which brings new challenges to social governance and supervision. Do humans recognize the subject rights and prediction functions of AI in marketing systems?

In the market environment, fairness is one of the most important criteria. But the sources of AI algorithms are algorithm designers and software developers. In their work, they have their own subjective attitude and even bias and will write this bias into intelligent algorithms consciously or unconsciously. At the same time, the market research data to be processed may also have problems such as different data standards, which will lead to discriminatory follow-up operations.

4.1.4. Decision Risk. The basic process of AI deep learning can be divided into training and inference, that is, training the deep neural network model on the basis of big data, and then inferring the data and drawing a conclusion on the basis of training. Obviously, if there is a problem with the market-oriented data, it may not only lead to the problem of the trained network model but also get the wrong decision-making results. This will produce destructive results for the whole marketing system.

4.2. Corresponding Solutions. The marketing system involves all aspects of society and plays an important role in economic construction. To avoid the above problems, first of all, we should pay attention to the cultivation of senior talents of AI [22]. In particular, we should pay attention to cultivating their ideology to ensure that they can correctly recognize their subconscious attitudes toward inequality and even discrimination. Ensure the fairness of AI algorithm, protect the fairness and justice of the economic market, and ensure the long-term stability of economic construction.

Second, accelerate the development of AI algorithm frameworks with my country’s independent intellectual property rights, eliminate the potential negative impact of foreign AI algorithm frameworks on economic development under the background of trade wars, and ensure that AI technology can finally be truly applied in my country’s economic construction, establish a good platform, and lay a solid technical foundation.

Finally, it is necessary to support the development of AI chips with China’s independent intellectual property rights. In the field of marketing, the core role is the intelligent processing of marketing data. Only by grasping the initiative in the development of AI chips and improving the technical level of chips, we can avoid the entire marketing system and even the national economy being controlled by others. At present, Baidu has developed the AI chip “Kunlun” in China, and large companies such as Huawei and Alibaba have followed suit and developed the latest AI chip products. This has greatly promoted the development of the smart chip industry.

4.3. Challenges Faced. The application of AI technology in the field of marketing has brought great convenience to enterprises and consumers, but technology has two sides. We must treat AI technology rationally and face up to the problems in the application of AI. According to the research of previous literature, we can understand the challenges faced by marketing in the era of AI from the following aspects.

One is the lack of compound marketing talents under the background of AI, which brings about the further connection between technology and marketing. At present, a
significant problem in the field of intelligent marketing is the further in-depth connection between technology and marketing. The lack of compound talents who understand the technology and the market makes enterprises face great obstacles in the process of applying AI.

The second is the data privacy protection and traffic fraud exposed in the process of AI marketing. The exposure of various data privacy news cases has made more and more users highly sensitive to the use of new technologies. A large number of illegal monitoring and interpretation of data without the consent of users seriously interfere with consumers’ daily life. Some enterprises even use intelligent technology to predict and analyze users’ personal information to obtain users’ privacy.

The third is the psychological burnout of consumers in the all-around AI marketing environment. AI technology can recommend various personalized information to consumers, but this kind of continuous and accurate recommendation based on consumers’ use traces is difficult to prevent consumers from getting bored [13, 19]. Ad recommendation anytime and anywhere, no ad interception across screens, and tracking recommendation of user browsing records have become more automatic and frequent driven by intelligent technology. Although AI technology can help enterprises accurately analyze user data, the data cannot fully reflect the hearts of consumers. Enterprises should avoid blindly following intelligent technology to prevent consumers from getting bored.

5. Conclusion
In the era of AI, marketing practitioners should make full use of the technical means of AI. Change the current situation of the marketing industry, improve the efficiency and pertinence of traditional marketing activities, realize the customized and intelligent design of products, and realize personalized and accurate marketing to customers. Fundamentally improve the economic benefits of enterprises and improve the vitality of products. The application of AI in the field of marketing is still in the initial stage of development. Enterprises must treat AI technology rationally when applying AI technology. We should not only see the convenience of data analysis and accurate identification brought by AI to enterprise marketing but also see the technical traps, user privacy, and other problems brought by AI applications. Of course, the application of AI technology in the field of marketing will have further development in the future, and enterprises should also carry out exploration and research in time.

Data Availability
*The dataset can be accessed upon request to the author.

Conflicts of Interest
The author declares no conflicts of interest.

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