



The Role of Artificial Intelligence Technology In Social Services

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ABSTRACT

With the development of AI technology and social networking media platforms, a social networking marketing strategy based on AI technology is being studied and applied by a wide range of car companies in conjunction with the need to develop various platforms. When we look at Tesla, Google, Uber, GM and Ford drones, an analysis of the changes in these technology companies reveals that the last three years have been far more intensive, rapid and focused than the last fifty years or so. Needless to say, artificial intelligence (AI) has not only come out of the lab, but more widespread APP platforms have brought us opportunities and developments, and a new technological singularity has arrived. Based on social network marketing and the characteristics of the automotive industry to organize and implement automotive social network marketing, in order to give full play to the technical advantages of AI, the audience and social advantages of the media platform, so as to achieve the precision and intelligence of automotive marketing promotion activities, in order to make the best marketing effect.

Keywords: AI Technology, Online Marketing, Convenient Life

I. INTRODUCTION

As the ultimate goal of the development of the intelligent networked vehicle industry, self-driving car technology has become the focus of the layout of the automotive industry in the new era. In the face of increasingly hairy technology, artificial intelligence technology in the new energy vehicles and unmanned self-driving cars, has become a major trend. Nowadays, the post-90s and post-95s consumer groups have been rising rapidly, and young people are becoming the backbone of social consumption, which is followed by a greater change in consumption concepts, product selection and decision-making patterns. Based on the youthfulness of the consumer group, automotive marketing is facing unprecedented challenges and opportunities. Young people's acceptance and loyalty to products and brands are no longer entirely dependent on the traditional quality of products and companies, brand voice accumulation, for fresh, exciting, personalized, interactive products and brands, they will show a higher degree of attention, which is one of the factors that each car company must consider when developing new marketing strategies.

As social media platforms such as Weibo, WeChat, Headline and Jitterbug are becoming important channels to connect products, brands and consumers, the 'Social First' marketing concept is being accepted by more and more car companies and has become the marketing strategy practice of many car companies. The development of AI (Artificial Intelligence) technology has made the analysis of massive application data of users on the above-mentioned social media platforms accurate and fast, which brings the possibility of accurate classification of customer groups, rapid targeting of target customers, and the planning and implementation of marketing activities based on materials. "AI + Internet + Electric Vehicle" is a huge opportunity in this era.

II. RESEARCH METHOD

The research purpose of this thesis is to summarize the different modes of artificial intelligence car field and mobile APP marketing, the corresponding communication effect and the existing problems, and finally give suggestions for improvement in marketing strategy. In order to achieve the purpose of the research, the author studied the relevant theories and then analyzed them empirically to achieve the research goal, and the specific research methods are as follows.

2.1 Literature research method

In this paper, by collecting and reading relevant literature at home and abroad, we review and sort out the theories and literature related to marketing knowledge, understand the status of research on AI technology in different

and different marketing models in recent years, and analyze the hot areas of academic research on the topic of AI technology.

2.2 Interview method

In order to understand the popularity and use of AI among cell phone users, and how AI helps us to live more conveniently and has more marketing value, and the feedback of users on different APP marketing models.

2.3 Observation method

Based on the usual observation and summary of APPs installed on our own cell phones, we also observed different kinds of APPs and APPs under different system software, compiled several modes of APP marketing and different communication methods, and by observing different groups of people, we came up with the importance of targeting and matching APP marketing activities.

III. DISCUSSION

3.1. Concept analysis of social network marketing based on AI technology

3.1.1 AI (Artificial Intelligence)

The definition of artificial intelligence "artificial intelligence" (Artificial intelligence) was originally proposed at the Dartmouth Society in 1956. Artificial intelligence is a new technical science that studies and develops theories, methods, techniques, and application systems for simulating, extending, and expanding human intelligence. Artificial intelligence is a branch of computer science that seeks to understand the nature of intelligence and to produce new intelligent machines that can respond in a manner similar to human intelligence.

The main material means that can be used to study artificial intelligence and the machines that can implement artificial intelligence technology are computers, and the history of artificial intelligence is linked to the history of computer science and technology. Artificial intelligence theory into the 21st century, is brewing a new breakthrough, artificial intelligence research results will be able to create more and more advanced intelligent "products", and make it in more and more areas beyond human intelligence artificial intelligence will make greater contributions to the development of the national economy and improve human life.

3.1.2 The development of productive life brought by social network marketing.

Social marketing refers to marketing based on social relationships. Social is also the social interaction between people in society, people use a certain way (medium) to pass information, exchange ideas, so as to achieve a certain purpose and activities.

Social network marketing, as a marketing model that reflects the needs of network customers and the characteristics of use, belongs to a new marketing model formed on the basis of Internet technology. At present, most enterprises in China have begun to use social network platforms for marketing, which can not only make the enterprise's visibility and market share can be effectively improved, but also make the enterprise's original marketing model has low benefits, high-cost defects can be effectively improved, so that products and services are more applicable and targeted, so that the social and economic benefits of enterprises can be effectively enhanced.

3.1.3 Low investment and good effect.

The application of social networks in the marketing process is usually composed of enterprises or users, and its development process mainly presents diversification and multiple fields, which can make the economic benefits of enterprises can be effectively improved. The application of social networks to marketing can effectively improve the development of products and attract the attention of users.

3.1.4 The applicability of marketing.

Companies mainly through direct sales, understanding customers and their needs, as well as the use of the product market conditions, so that the applicability and quality of products can be effectively improved, so as to enhance the competitiveness of enterprises. In the context of social networks, marketing can enable companies to gain more users, especially potential users in the network, and promote them in this way, which has significant effect and higher credibility than traditional marketing.

3.1.5 Improve customer stickiness.

In the context of social network, the Internet as a communication platform has built a bridge between individuals and individuals, between enterprises and enterprises, and between enterprises and individuals. Stars will create topics to interact with their fans to maintain exposure and maintain fan stickiness, and enterprises will use enterprise social groups to certify each other's integrity and business strength, and enterprises can also enhance customer stickiness through official website news announcements, regular customer Q&A sessions, customer service assistants, community ground promotion, and customer event sponsorship.

Social marketing has been around for a long time, but with the development of Internet technology, especially social media (platforms) (social media is a tool and medium used by audiences to develop social objects, conduct social activities, and manage social relationships, the key value of social media is to visualize and instrument people's social activities, and to make interpersonal information delivery digital, real-time and traceable.) This makes social marketing easier to do, broader in scope, and more diverse in form and content.

3.2. The main features of AI technology-based automotive social network marketing

3.2.1 More accurate and intelligent information pushing and communication interaction

AI technology-based social network marketing can achieve accurate insight of users based on efficient and comprehensive processing of a large amount of data collected by social media (platform) through AI technology, so that the intelligent distribution of AI technology can achieve personalized matching of push information and communication interaction, matching information and audience from environmental variables, industry dimensions, user preferences, etc., and intelligently recommending content to interested users. The content is intelligently recommended to interested users. For example, AI technology has penetrated into the production, distribution, interaction and management of the platform's recommended content, from deep intelligent creation and delivery of text, images and video content to artificial intelligence to improve the Q&A experience.

From deep intelligent creation and delivery of text, image and video content, to artificial intelligence to improve the question-and-answer experience, to intelligent recognition to achieve human-machine interaction, etc., AI technology-based automotive social network marketing has realized the accurate matching of information and audience.

In the process of interaction between enterprises and users (potential customers), the questions of users (potential customers) can be intelligently matched to the best and most suitable answerers, and then the answers will be sorted and optimized according to the quality of content, matching degree and marketing orientation and timely push. In terms of auto marketing, the platform brings together professional answerers and field experts in the auto industry, auto technology, brands and models, marketing services, and even corporate executives and industry elites to help spread word-of-mouth and social marketing of auto brands and products with the help of their professional discourse.

Of course, AI technology is not only in the automotive industry, but has penetrated into clothing, food, housing and transportation to experience more convenience brought to us by life.

3.2.2 The interactive experience of marketing activities becomes more prominent

One of the characteristics of social marketing strategy is the interactivity of marketing activities, and the intervention and support of AI technology makes this interactive experience more prominent. Here I give an example, mobile APP marketing, i.e., mobile application marketing, refers to the marketing promotion activities carried out by advertisers through the use of applications installed on mobile terminals such as smartphones and tablets. As a new marketing model in line with the characteristics of the mobile Internet era, APP marketing is accepted and respected by many enterprises for its precise interactive features and personalization. APP marketing is available in various means, covering text, images, events, pictures and other forms of expression, while mobile APP advertising is the quickest, most direct and most popular cut-through.

Mobile APP advertising refers to a way for advertisers or platform providers to use smartphones as a medium to advertise in the form of pictures, text, audio and video to users through applications according to their own marketing plans. Unlike the traditional mode of TV, magazine, online and outdoor advertising, app advertising can

APP advertising platform can achieve precise location targeting through cell phone positioning. At the same time, it can make comprehensive analysis for user models, APP usage habits and other attributes to target advertising and improve advertising effect. The "reachable" feature of smartphones makes APP ads free from the shackles of one-way communication, and users can click on the ads to interact with advertisers. In addition, although the cell phone screen restricts the display area of ads, the "small and precise" feature of APP ads is also stimulated, and the ads can easily attract users' attention and generate advertising value with an exclusive view within the limited screen area. It can be said that this very impactful new advertising form of APP advertising has become a necessary means of marketing and promotion nowadays.

The interactivity of any online marketing strategy is manifested in two specific aspects. One is the interaction between the audience and the business achieved through the social media platform. The use of social media platform makes one-sided brand and product marketing information pushed to the majority of potential customers, which makes the pushing of brand and product information and the implementation of marketing activities smoother and easier to be understood and accepted by the audience.

Second, the interaction between the majority of the audience, the starting point of the creation of social media is to provide a platform for social interaction and information exchange between the majority of the audience, and its marketing function is incidental to the audience gathered to a certain extent and the development of the platform to a certain level.

3.2.3 The development of AI technology makes information spread faster

Artificial intelligence is gaining ground in all walks of life, playing a great role in healthcare, bioscience, banking and finance, online education and e-commerce, giving rise to one giant after another (such as Ali, Baidu, Tencent and Today's Headlines). In addition, in the automotive field, it is also incubating another big giant, that is, Tesla. Since this year's epidemic, Tesla's stock price has soared five times, with a market value of more than \$500 billion, making it the world's No. 1 car company in terms of market value, far exceeding the traditional car leader Toyota. And in the future, artificial intelligence will drive Tesla's rapid growth, maintaining the industry's leading position, giving investors and the market unlimited imagination, let's take a look at how Tesla has become a technology-enabled business car complex it.

In the field of car driving, mainly big data, artificial intelligence two technologies in the problem, Tesla driving system implementation mainly contains information collection, feature extraction, training and learning, evaluation, feedback to improve the five steps, through data + algorithm + feedback continuous vertical integration, improve the ability to drive automatically.

The first step of information collection, in the process of car driving, the driving system needs to sense the traffic road conditions, road pedestrians, the surrounding environment before making driving judgments. In Tesla mainly through a large number of sensors (such as front camera, rear camera, LIDAR, ultrasonic radar, millimeter wave radar) for information collection.

The second step feature extraction, after collecting a large amount of information through a large number of sensors inside and outside the car, Tesla uses deep learning algorithms of neural networks to perform feature extraction. There are 27 common deep learning neural network algorithms such as perceptron (single layer neural network), feedforward neural network, deep feedforward neural network, recurrent neural network, deep convolutional neural network, and inverse convolutional neural network, but Tesla does not use them. In Tesla need to determine the interrelationship of multiple environmental variables such as vehicles, sidewalks, traffic lights, obstacles, pedestrians, drivers, temperature, humidity, etc. at the same time, so their arithmetic system must be super powerful and run multiple neural networks (about 50) at the same time to work.

3.3. Implementation of AI technology-based automotive social network marketing

3.3.1 Focus on the mass voice of communication media (platform)

The mass voice is the basis of the flow of consumers' attention and brand influence, and it is an effective guarantee of the audience base required for social marketing activities. Therefore, when choosing the media platform for AI-based social marketing strategy, automobile manufacturers must consider the mass voice base of the media platform, and only when the mass voice base reaches a certain scale can the advantages of AI technology in social marketing be fully utilized, so as to achieve the purpose of leveraging the momentum and making the best effect of AI-based social marketing strategy.

Nowadays, Sina, Tencent, Netease and other media often have multiple information dissemination and audience interaction platforms, and also have specialized channels for automobiles. Using these media to carry out AI technology-based social network marketing for automobiles, we can take advantage of their multi-platform sound volume data, analyze the overall sound volume of the media and the hot spots of target audience attention through AI technology to find the real hot spots of target users' attention in the cycle, and then use multiple information dissemination channels of the media to distribute the content of marketing activities, customize the communication strategy and content service planning, and form the whole network exposure.

The cross-border cooperation between Mercedes-Benz GLA and League of Legends is based on Sina Weibo's social data in the early stage of the cooperation, and discovered the matching channel between Mercedes-Benz interest users and game circle users on Weibo platform - the keyword "League of Legends" is the No. 1 search term in the game field on Weibo platform. The search volume of "League of Legends" keyword on Weibo platform is the first in the game field. Therefore, in the marketing strategy, we combined the fearless and youthful brand proposition of Mercedes-Benz brand, carried the hot spot of League of Legends, intercepted the high attention point of users, and expanded the voice of Mercedes-Benz GLA brand. Eventually, the brand spirit and the game spirit were bundled to inspire resonance, implanting Mercedes-Benz GLA deeply into the impression of the circle audience and enhancing the audience's preference for the brand.

3.3.2 Audience groups should eventually be transformed into target customers

On the one hand, professional sound volume is the key basis for accurate screening of potential customer groups, and through the use of specialized content segmentation of different preferences of user groups tend to achieve the precipitation of the target user pool. Based on the professional sound volume of new cars, car companies can use AI technology to evaluate the data performance of relevant professional content in various dimensions, find the interest points and missing points of user cognition, and provide data and technical support for marketing content services to target user needs and characteristics. On the other hand, with the help of AI technology, we can accurately understand consumers' needs and preferences, and can intelligently recommend sales strategies and give targeted suggestions according to consumers' different consumption preferences. Intelligent online sales will analyze user needs in advance, so that car dealers can understand the needs of users in advance, without the need to go through complex and redundant communication to understand the ideas of users. At the same time, with the help of AI technology, they can accurately grasp the best time to communicate and the communication and sales techniques of thousands of people, so that the car marketing services can be different from each other, thus improving the user experience while also reducing communication costs and improving the efficiency of sales.

3.3.3 Focus on the customer's own communication effect

Boomers and Bittner expanded the traditional 4Ps marketing strategy into a 7Ps marketing strategy, which consists of Product, Price, Promotion, Place, and People, Physical Evidence, and Process, thus More focus on content related to human touch points. Social network marketing has the characteristics of many-to-many information transmission, the use of social network media to deliver information has a stronger interactive, easy to be more people's attention. At the same time, with the growing maturity of consumer concept and behavior, auto users are more willing to actively obtain information and share information, in social network marketing, users show a high

degree of participation, sharing and interactivity, and this participation, sharing and interactivity will promote a group (circle) to a brand and a product awareness, easy to form a deep impression and produce good communication effect. Therefore, when applying AI-based automotive social network marketing, car companies must take advantage of their customers' own circles and communication effects to achieve a marketing effect with half the effort.

Due to the asymmetry of information and the lack of professional knowledge, people often hope to rely on the experience of experts or predecessors when making car consumption, and the sense of trust will make more than 60% of purchase decisions influenced by friends. One person who falls in love with and uses a brand or a product may make a circle of people fall in love with it. The formation and existence of circles is itself based on having the same interests and having basically similar aesthetics.

3.4. Through the AI empowerment, artificial intelligence to the automotive industry widely used

Xiaopeng Auto has always positioned its products as intelligent cars, AI Car, which must have the ability to sense, think, learn from each other and communicate with the environment. He Xiaopeng, chairman of Xiaopeng Auto, has mentioned more than once that the core of Internet cars lies in AI capabilities. Scalable and safe evolution of autonomous driving and Internet capabilities is one of the important foundations of smart cars. But

The company's newest product is a new product that will be available in the marketplace. Xia Heng, co-founder and president of Xia Peng Auto, said clearly at the 2018 Future Car Show and Future Car Developer Conference, "We want to find our differentiation in the combination of artificial intelligence and cars, and we build AI Car with high value, high quality and high intelligence evolution for young users."

Xiaopeng car's products are already equipped with voice control, real-time road navigation, mobile remote control, OTA remote upgrade and other functions, AI is not only applied to self-driving, but will also give Xiaopeng car closed-loop integration of intelligent network connectivity capabilities. In addition, Xiaopeng Auto has also introduced AI into the development process and manufacturing.



As a pioneer in the new energy vehicle industry, Tesla boasts high-tech electric vehicles and lives up to its name. Comparing each Tesla model with other brands' electric cars in the same price range, Tesla cars can be far ahead in terms of 100km acceleration and range. In addition, Tesla is moving toward a smart mobile terminal with its advanced OTA upgrade system and Autopilot intelligent driving system. The OTA upgrade system allows Tesla EVs to not fall behind with the model year, but rather to update the system through software, meaning that owners of Tesla EVs can add features and functionality to their vehicles through remote system upgrades to enable new systems for older models. Autopilot is currently one of the best intelligent assisted driving systems of its kind, and the speed of its chip processing is another advantage of Tesla's products over other brands of the same type of car. In the field of advanced technology, especially in product intelligence, many domestic new energy vehicle brands fail to reach Tesla's level, and most of them are still in the middle and low end.

IV. CONCLUSION

The emergence of artificial intelligence not only brings a lot of convenience to our lives, but also brings the progress of science, artificial intelligence in the process of continuous development and progress for the progress of human society has also created a new situation, the development of artificial intelligence also provides an important basis for the enrichment of human and theoretical knowledge, this paper by going to analyze the development and role of artificial intelligence in human life, and at the same time how to better the artificial intelligence Better development, to provide more convenience for the progress of human life, while through the proficiency of human intelligence can better provide more favorable supplement for human life and see the impact of artificial intelligence for human life. The emergence of artificial intelligence is more for human life becomes more convenient, more efficient, more rewarding, reduce a lot of unnecessary worries, and the future of artificial intelligence is more with automatic adjustment function, can provide the most effective convenience for human life to have the most effective network intelligence.

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