

Retraction

Retracted: Marketing Method and System Optimization Based on the Financial Blockchain of the Internet of Things

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] C. Yan, J. Zhu, Y. Ouyang, and X. Zeng, "Marketing Method and System Optimization Based on the Financial Blockchain of the Internet of Things," *Wireless Communications and Mobile Computing*, vol. 2021, Article ID 9354569, 11 pages, 2021.

Research Article

Marketing Method and System Optimization Based on the Financial Blockchain of the Internet of Things

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This article makes relevant research and analysis from theory and practice, respectively. At the same time, with reference to the current state of the Internet, relative analysis was used to focus on the state of commercial banks. The analysis mainly focuses on the problems encountered in the current Internet development in various forms such as the bank's sales status and customer products. In addition, it really made a reasonable opinion about the relevant sales status of this bank. It systematically studied the development history of marketing products of financial blockchain in China's financial blockchain and analyzed the process of gradual improvement of the functions and characteristics of marketing products of financial blockchain in China. The characteristics and shortcomings of the marketing products of the financial blockchain were discussed in detail, and from the perspective of technological innovation, the application of emerging technologies in the marketing of China's financial blockchain was analyzed. This article analyzes the many challenges and opportunities faced by security firms in the development of the Internet. Under the new situation, what kind of development model to adopt and how to transform and upgrade is the strategic proposition that security firms must think about. Based on Internet finance, this article finds that the equity crowdfunding model can be selected in the future development of security companies. On the one hand, the use of equity crowdfunding by security firms can enhance their direct financing capabilities, which will benefit the security industry, especially Internet security firms. On the other hand, through equity crowdfunding, security companies can expand direct financing channels for small, medium, and micro enterprises to promote entrepreneurship. The paper promotes the development of Internet finance, thereby improving the ability of the capital market to serve the real economy.

1. Introduction

In the course of these years of development, the development of the Internet has gradually accelerated, and it has played a significant role in improving the pattern of microfinance and other aspects [1]. In the later period, some Internet companies gradually launched some lending platforms or used some new models of crowdfunding to integrate financial and other aspects of funds. Therefore, we can see that the overall development status of the Internet has had a great impact on the financial industry [2]. For the development

of modern banks, how to solve the current problems encountered by banks in the establishment of banks and some sales methods is the most concerned issue of many researchers [3]. In this article, the emphasis is on the analysis of Bank A, from both theoretical and practical perspectives, to realize reasonable research on the various problems that this bank has produced. At the same time, some more effective marketing strategies and methods have been proposed for the development of this bank. Blockchain provides a decentralized trust establishment model and provides new development concepts and development opportunities for the future of

finance, Internet of Things, and other fields. With regard to these opinions, it is hoped that the bank can have a more stable development direction during the development process.

The overall development method and speed of Internet finance are very advantageous. Therefore, for the previous commercial banks, many related businesses gradually began to lose their advantages [4]. Commercial banks must make reasonable innovations so that future developments will not be replaced. Whether it is from its own competitiveness or from some emerging products, it must have its own unique form. In the current Internet finance, the third-party payment method has become a relatively common payment method that people use now. The ways that many companies use to raise funds have also changed significantly [5]. It can be seen that Internet finance has made some previous banking services no longer available for special use by banks. There have also been significant changes in the overall profitability of the banks. In this article, the focus is on the analysis of the various forms of influence that Internet finance has on commercial banks. Although the application prospect of blockchain is very wide, its theoretical research is not perfect, and there are still some security problems that need to be solved urgently. Whether an effective solution can be proposed will directly affect the implementation and development of blockchain applications. On the basis of research, it is hoped that it can bring better creativity and development capabilities to commercial banks. During the operation of a bank, it must also be able to improve its overall capabilities from the perspective of services and products. With the continuous rise and development of new technologies such as cloud computing and the Internet of Things, market competition in the IT industry has become increasingly fierce [6]. Only by accurately grasping the market demand points, providing products that meet customer needs, and precision marketing, IT companies can achieve rapid development.

From the perspective of customer needs, it is guided by marketing theories such as 4Ps and 4Cs in marketing theory. For using literature research methods, empirical research methods, questionnaire survey methods, and fully combining the actual situation of the L Group, it is aimed at the marketing management of the corporate call center. In terms of problems such as scattered customer management, imperfect sales mechanism, asymmetry in distribution information, single promotion method, and insufficient assessment and incentives, they research the marketing management strategy of its call center. Through research, it is found that the steady growth of the IT industry has intensified industry competition; as an important link to connect with customers, call centers play a huge market role in both telesales and customer service; call centers must establish a set of appropriate marketing management strategy combination; through customer management, business opportunity management, network marketing, assessment and incentives, and other measures, they improve call center performance and management, so as to better support the company's performance development and expansion. This article proposes a KDM secure Bitcoin encrypted wallet solution, which solves the problem of capital loss caused by local file loss by introducing cloud storage to back up encrypted files. The research in this

article proposes a set of executable solutions for the development of marketing management strategies of the L Group's call center, which solves the current problems of the L Group's call center, promotes the improvement of the management of the L Group's call center, and thus plays a greater role for the L Group. This article also provides reference for the marketing management of the call center for IT-type peer companies or companies (B2B type) that require transactions.

2. Related Work

According to the combining of more than 1,300 financial blockchain marketing startups or InsurTech companies, Jesus et al. [7] found that the marketing innovation of financial blockchain is divided into four major types, namely, product innovation and financial blockchain marketing innovation, enterprise operation innovation, marketing data, and intelligent platform application of financial blockchain. Yu et al. [8] suggested that the marketing-related service industry of financial blockchain should look for subdivision opportunities in the marketing industry chain of financial blockchain and use technological innovation to solve the inefficiency dilemma in the existing business model and break the original. For the current monopoly of traffic, channels, pricing, etc., we can use information technology to open up the innovation outlets in the marketing industry chain of the next financial blockchain. Maiti and Ghosh [9] believe that with regard to the changes in the marketing industry of financial blockchains, financial blockchain marketing companies should focus on the following aspects: first, when customers need it, provide customers with seamless digital channels, valuable insights, or sales; second, use big data to price risks and form insights; third, develop strategic cooperation with a new generation of digital intermediaries or commercial entities that represent customer needs; fourth, offset premiums through scale effects and operational efficiency loss or create new value.

In terms of the application of big data, Singh and Singh [10] divided the development stage of the marketing industry big data application of the financial blockchain into three stages: internal circulation, extension expansion, and national application. At the same time, through the marketing of financial blockchain research on the status quo of data application, which puts forward the potential breakthroughs in the application of big data in the marketing industry of financial blockchain, they are expanding the scope of underwriting, achieving personalized pricing, optimizing underwriting claims, improving antifraud performance, improving operational efficiency, and helping risk monitoring. Iftekhhar et al. [11] believe that in the era of big data, by collecting information such as social networking platforms, data mining is performed on consumers, and people's behavior patterns and consumption habits can be analyzed, so as to provide different consumers with personalized and customized services and carry out precise risk control. Therefore, individualization and customization are the goals to be achieved by the marketing development of the financial blockchain in the future. In terms of blockchain,

Viriyasitavat et al. [12] in the marketing blockchain project team of financial blockchain believe that the marketing of financial blockchain and blockchain have genetic similarities and connections, and sociality is the common attribute of the two. Realizing the collection and collaboration of individuals is a common appeal, and rebuilding trust is the core value. Therefore, the marketing of financial blockchain is a typical scenario for blockchain applications. The blockchain application of financial blockchain marketing should not only focus on talent training but also focus on the integration and innovation of business and technology and focus on platform construction; it should not only focus on the construction of corporate and industry capabilities but also focus on external relations; particularly, it is the integration of blockchain technology [13]. Through the mosaic analysis of the marketing business of blockchain technology and financial blockchain, it is believed that the current research and development or alliance of blockchain technology by financial blockchain marketing companies in the country are still in the initial stage of concept or experimentation of the existing industrial applications. It is still possible to be replaced or improved in the process of future technology changes. The key to the adoption of blockchain technology in the future depends on solving the pain points of industry development and then achieving the promotion of the marketing industry value of financial blockchain [14]. The application of blockchain in the marketing industry of financial blockchain needs to break through several technical bottlenecks, including network scalability to be strengthened, security still to be improved, and industry standards and systems still being explored [15]. In terms of artificial intelligence, the application of artificial intelligence technology in the marketing industry of the country's financial blockchain is prospected [16]. It believes that with the development of genetic testing technology, intelligent testing technology may change the underwriting model and pricing model of financial blockchain marketing companies. Financial blockchain marketing companies should prepare in advance, fully understand, and adopt new reasonable actuarial methods, new systems, etc., to avoid risks and serve customers [17–19]. At the same time, intelligent control is the product of the combination of control theory, artificial intelligence, and computer science. In the future, intelligent control and automatic planning technology will also be more mature, and the application will be more extensive [20, 21]. In terms of the Internet of Things, the “marketing of the financial blockchain of the Internet of Things” is defined as the marketing company of the financial blockchain with the Internet of Things technology as the core to provide customers with smarter financial blockchain marketing products and claim services [19]. At the same time, it takes property insurance as an example to analyze the necessity and feasibility of the marketing of the financial blockchain of the Internet of Things [22–26]. Necessities include that the Internet of Things can help solve the current problem of unfairness caused by the static marketing and pricing of the financial blockchain, the inaccurate settlement of claims in the marketing industry of the financial blockchain, and the huge demand for the marketing of the country's financial blockchain. The feasibility mainly includes the

advantages of the Internet of Things itself in terms of technology, timeliness, relevance, and accuracy, as well as relevant policy support given by the state [27]. The innovative significance of the marketing products of the Internet of Things financial blockchain is summarized: from the customer's point of view, its premium collection is more scientific, the efficiency of claim settlement is improved, and the probability of risk occurrence is reduced. From the perspective of the marketing company of the financial blockchain, the marketing products of the Internet of Things financial blockchain innovate profit models and create new benefits, innovate risk control models and reduce costs, improve customer service levels, and increase insurance renewal rates [28–30].

3. Construction of a Marketing Model Based on the Financial Blockchain of the Internet of Things

3.1. Hierarchical Distribution of Internet of Things Finance. The 4P theory was born in the United States in the 1960s, and it emerged with the introduction of the marketing mix theory. 4P, respectively, corresponds to Product, Price, Place location or channel, Promotion. This theory believes that if a marketing mix includes the right products, the right price, the right distribution strategy, and the right promotion strategy, then it will be a successful marketing mix, and the company's marketing goals can also be achieved by this. In the application of the Internet of Vehicles based on the blockchain, users are most concerned about the security of private data, including identity privacy and content privacy in the communication process. Marketing managers regard 4P mobile banking and marketing-related basic theory overview theory as a classic of marketing theory, which is mainly due to the conciseness and wide application scope of the theory.

$$\begin{aligned} u(x) &= \int (at^2 - bt - c) dt, \\ v(x) &= \int (at^2 + bt - c) dt. \end{aligned} \quad (1)$$

Target market analysis refers to segmenting the market according to a specific standard, taking one or more of the segmented markets as the target market, and positioning its products based on this standard. Choosing the target market is after segmenting the market, in order to provide consumers with better services and products; the company chooses the corresponding market as the target. It is not that the target market must be selected because the submarket has advantages. Rather, because enterprises cannot cover the entire market due to restrictions on human resources and capital in the development process, submarkets are needed to play a role, and corresponding strategies can be formulated according to the requirements of consumers to pursue economic benefits.

$$f(x) = \begin{cases} \frac{v(x) - u(x)}{v(x) + u(x)}, \\ \frac{ax + b}{ax - b}. \end{cases} \quad (2)$$

Traditional marketing methods are mainly used for manual sales via telephone or agents. Such methods are costly, low in efficiency, and poorly targeted. In particular, telemarketing is often used by customers as harassing calls and triggers complaints. In terms of marketing, traditional models are still adopted, such as magazines, newspapers, soft articles, positions, EDM, and Baidu keyword placement. These methods have high input and low output, and they are still in their infancy in new media marketing.

$$G(n) = \{g(i)\}, \quad i = 1, 2, \dots, n. \quad (3)$$

PEST refers to Political, Economic, Social, and Technological, and it analyzes the macro environment of enterprises based on this model. In the macro environment, how to operate and develop enterprises needs to learn from this model. The external environment is very important to the development of an enterprise, and it promotes or restricts the development of the enterprise, but the enterprise cannot control the external environment.

$$y(s, t) = f(s, t) \cdot \max(ax^2 + bx + c, s, t). \quad (4)$$

In the early 1980s, the concept of SWOT was first proposed by Werick, a professor of management at the University of San Francisco in the United States. SWOT refers to Strength, Weakness, Opportunity, and Threat. The purpose is to find and determine the competitive advantages, developmental disadvantages, opportunities, and threats that the company has. The scientific analysis method organically combines the company's strategic deployment, the company's internal resources, and the external development environment.

$$p = \frac{\sum f(x(i)) \cdot x(i) + \sum a \cdot y(s, t)}{\sum f(x(i)) \cdot x(i) + \sum a \cdot y(s, t) - c}. \quad (5)$$

3.2. Blockchain Marketing Algorithm. Compared with traditional consumer groups in the new era of the Internet, consumer groups have the three major attributes of mobility, localization, and socialization. In the consumption process, they also present three major characteristics of all-weather, personalized, and multichannel. The corporate marketing system in the new era is to establish a consumer-centric C2B system, supported by a big data platform.

$$q[x] = \frac{1 + (f(x) + n)^{-p}}{1 - (f(x) + n)^{-p}}. \quad (6)$$

(1) In the Internet era, companies have been forced to reconstruct the entire operating process from the perspective of customers. First, they must truly understand customer

needs and adjust existing marketing models from the perspective of customers. A major advantage of the WeChat platform is that it can quickly collect and sort out customer information, acquire and create user needs, so as to formulate product development and service strategies, and conduct precise marketing for target customer groups. (2) When formulating marketing strategies, it is necessary to consider delivering the various values of the product (values are generated by functions, features, brands, etc.) to customers. WeChat is an important platform for communicating with users. It can directly transmit product features, marketing activities, brand value, and other information to customers through message push.

$$s \cdot (p \cdot f(m) + q \cdot y) \bmod m = k \cdot p. \quad (7)$$

(3) With the rise of technology, especially the emergence of social networks, the direct dialogue between enterprises and consumers is no longer confused, but point-to-point static communication mechanism gradually evolved into a many-to-many, three-dimensional dynamic communication mechanism. The WeChat platform can provide consumers with 7 * 24 hours of uninterrupted communication channels. At the same time, combined with the o2o mode, it forms a closed-loop online and offline, integrates multichannel communication, collects customer feedback, and achieves real-time response and comprehensive coverage. The KDM secure symmetric encryption algorithm is used for encryption, which avoids the problem of key entropy leakage and improves the security of encrypted wallets. The data collected from customers has become the basis for future product and service improvements. (4) The extensive use of data, social tools, and LBS technology makes people's "life trajectory" recorded on the Internet, forming the so-called "big data" to locate customer portraits, analyze consumer behavior characteristics, and conduct risks. Prevention and control provide a data basis. The biggest feature of WeChat marketing is that it can quickly acquire a large number of customers and achieve the accumulation of large amounts of data, so as to achieve precise positioning and personalized marketing.

P theory: product (Product), price (Price), channel (Place), and promotion (Promotion). When an enterprise conducts marketing planning in the market, it is not only necessary to fully understand and analyze the external environment in which the enterprise is located but also necessary to establish a set of marketing strategy portfolios by analyzing the market from Figure 1. With this tool, the enterprise can effectively obtain from the market. Only by executing the marketing strategy plan, conforming to the current environment, and satisfying the market demand, the enterprise tasks can be achieved. On the basis of the original 4P combination theory, two factors P are added, namely, Power and Public Relations, and a modern big marketing strategy, referred to as 6Ps, is proposed. 6Ps can better target the market with trade barriers that existed at that time. Subsequently, in addition to the 6Ps of big marketing, several factors including Probe, Partition, Precedence, Position, and People were added to arrive at the P marketing theory combination, which made the original 4P theories finally perfected.

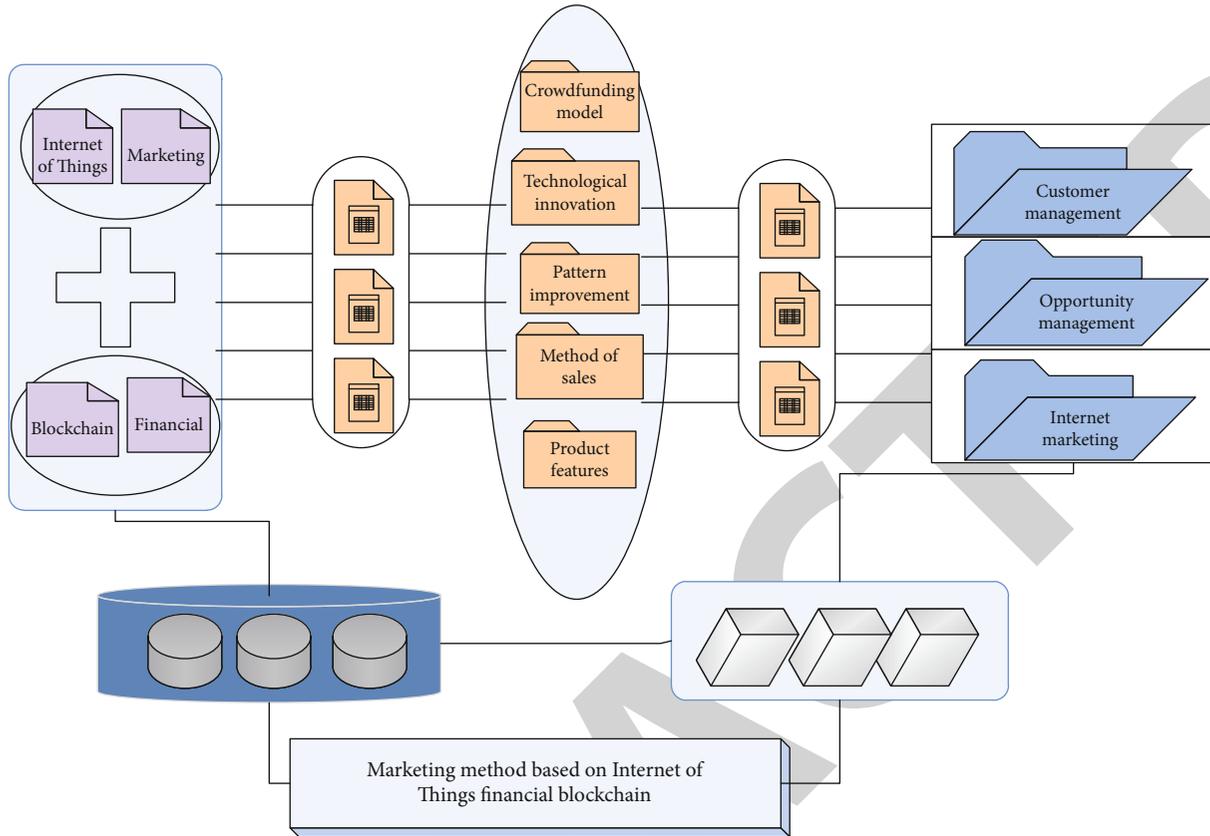


FIGURE 1: Hierarchical distribution of the financial blockchain of the Internet of Things.

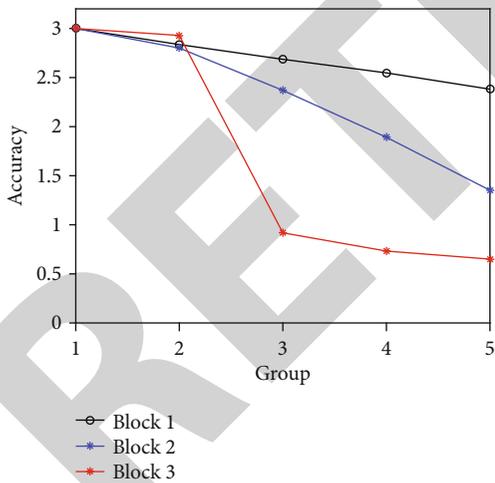


FIGURE 2: Comparison line chart of the accuracy of IoT marketing models.

Based on the above WeChat marketing model foundation in Figure 2, they formulate five WeChat marketing strategies for CS finance’s product development strategy, sales channel strategy, customer experience strategy, precision marketing strategy, and brand building strategy and combine big data to achieve and optimize these marketing strategies. At the same time, they build and optimize the WeChat public platform structure according to these five marketing strategies,

make full use of the advantages of WeChat’s huge user base, integrate resources, shorten marketing channels, and make it a marketing service integrating product sales, marketing, customer service, and brand promotion, realizing the innovation of marketing models of financial blockchain marketing companies, and helping insurance companies break through the bottleneck of transformation and development. (3) Implement WeChat marketing strategy in all management links of CS finance. The expansion layer encapsulates programmable smart contracts, various script codes, and algorithms. It provides an interface for upper-level applications through smart contracts, making the blockchain have programmable properties. They implement WeChat marketing strategy in the daily operation and management of the company’s actuarial, business, service, and marketing departments, formulate relevant regulations, and improve the company’s product development, marketing promotion, customer service experience and brand building, and other aspects of efficiency and quality, to provide customers with a full-process service from insurance, preservation to claim settlement. At the same time, each department is interlocking and complementary to each other, forming a closed marketing loop.

3.3. *Optimization of Marketing Model Parameters.* The marketing industry of traditional financial blockchain has developed so far. Although many aspects have been partially improved, for most financial blockchain marketing companies, there are still many development bottlenecks that need

to be broken through. Mainly reflected in the following: (1) Business model: although traditional financial blockchain marketing companies pay more attention to online platforms, their actual marketing strategies habitually rely on off-line channels; the degree of industry informatization is low; the insurance process is lengthy and cumbersome; products and businesses homogeneity of the model; insufficient interaction with customers. (2) Actuarial pricing: except for industry-leading companies and innovative companies, most insurers' pricing factors are slow to update; pricing methods continue to stay in the GLM model; pricing systems are closed and opaque, and lack communication with the outside world. (3) Claim settlement: manual intervention dominates; most companies have low technical content in claim settlement; lack of linkage with the underwriting link. (4) Organizational structure: the traditional financial blockchain marketing company has many levels of organizational structure, and the departments are complicated and not flexible enough; the front and back offices are not smoothly connected, and the disconnection is serious; the labor-intensive development path of human sea tactics is still adopted. (5) Expenses and costs: increasing business volume brings huge business data, and it is more difficult for traditional insurance companies to follow-up information processing capabilities, and operation and maintenance costs increase; in addition, some insurance companies have vicious competition and set fee rates in violation of regulations, giving them financial services. In addition, we have carried out a detailed security certification for the solution, which proves that the cloud storage will not obtain any valid information about the wallet private key during the interaction with the user. The behaviors of blockchain marketers' noncontractual benefits make it difficult for traditional financial blockchain marketing companies, especially small and medium property insurance companies, to dilute their expenses.

(1) Product strategy: it refers to the content of decision-making such as product development, product planning, product design, and delivery date from Figure 3. Its influencing factors include product characteristics, quality, appearance, accessories, brands, trademarks, packaging, guarantees, and service. (2) Price strategy: it refers to the principles and objectives of price setting. The influencing factors include payment methods, credit conditions, basic prices, discounts, wholesale prices, and retail prices. (3) Promotion strategy: it refers to the strategy of how to encourage consumers to purchase and increase sales through various promotional methods. Its influencing factors include advertising, personnel sales, publicity, business promotion, and public relations. (4) Distribution strategy: it refers to the channel strategy of how products reach the end consumers through various distribution channels. Its influencing factors include distribution channels, regional distribution, types of intermediaries, transportation methods, and storage conditions. The above four types of marketing combinations are collectively referred to as marketing mix strategies. The basic idea of marketing mix strategy is as follows: first, formulate product strategy; secondly, formulate price, promotion, and distribution channel strategies to form the overall strategy, so that products that meet customer needs can meet market

prices and attractive promotional methods; finally, arrive the consumer process. The success or failure of a company's marketing strategy is directly related to the performance level of the company's sales market. A set of effective and in line with the market's marketing strategy is the basis for success in today's market competition.

4. Application and Analysis of Marketing Model Based on Internet of Things Financial Blockchain

4.1. Simulation of Marketing Strategy Module. The L Group is the leading cloud computing overall solution provider and cloud service provider. It has formed an overall solution service capability covering three levels of IaaS, PaaS, and SaaS, relying on high-end servers, mass storage, cloud operating systems, and information security technology. They create a leading cloud computing infrastructure platform for customers, based on government, enterprise, and industry informatization software, terminal products, and solutions, to fully support the construction of smart government, enterprise cloud, and vertical industry cloud. The L Group's turnover has increased rapidly for four consecutive years, with operating income of 45.1 billion. The L Group ranked 10th among the top 100 electronic information industries in China, and its comprehensive strength ranked among the top two Chinese IT companies, the first Chinese independent brand software vendors, and China independent brand IT service providers. The second place, the third place is among the top 500 competitiveness of China's large enterprise groups. The sales volume of L Group's servers ranks fifth in the world and No. 1 in China: the L Group storage has ranked first in sales of state-owned brands for 10 consecutive years; the L Group has the largest market share of management software for 11 consecutive years. The core products of the L Group are server and ERP business, and the competitive situation it faces can be analyzed for these two types of products. It adopts multiple technologies such as automatic photo shunting, dereflecting, component recognition, and image angle correction. Through a large amount of data accumulation and model iterative learning, the entire process from case reception, damage determination to maintenance plan decision-making has been formed. The application layer encapsulates the actual application requirements and implementation cases of blockchains similar to programmable digital currency and programmable finance. According to the official statement of Ant Financial, the fixed loss insurance can save about 2 billion in the cost of the financial blockchain marketing industry every year.

The development of an intelligent quotation system to ensure that customers can get the most accurate quotation in the fastest way is the key to the promotion of insurance policies. The company chose an intelligent quotation system for life insurance quotation in Figure 4. The customer needs to answer seven basic questions. If the customer answers "yes," the system will proceed to the next step under the guidance of the logic tree. If the answer is "no," the system will immediately generate an insurance policy quotation. After

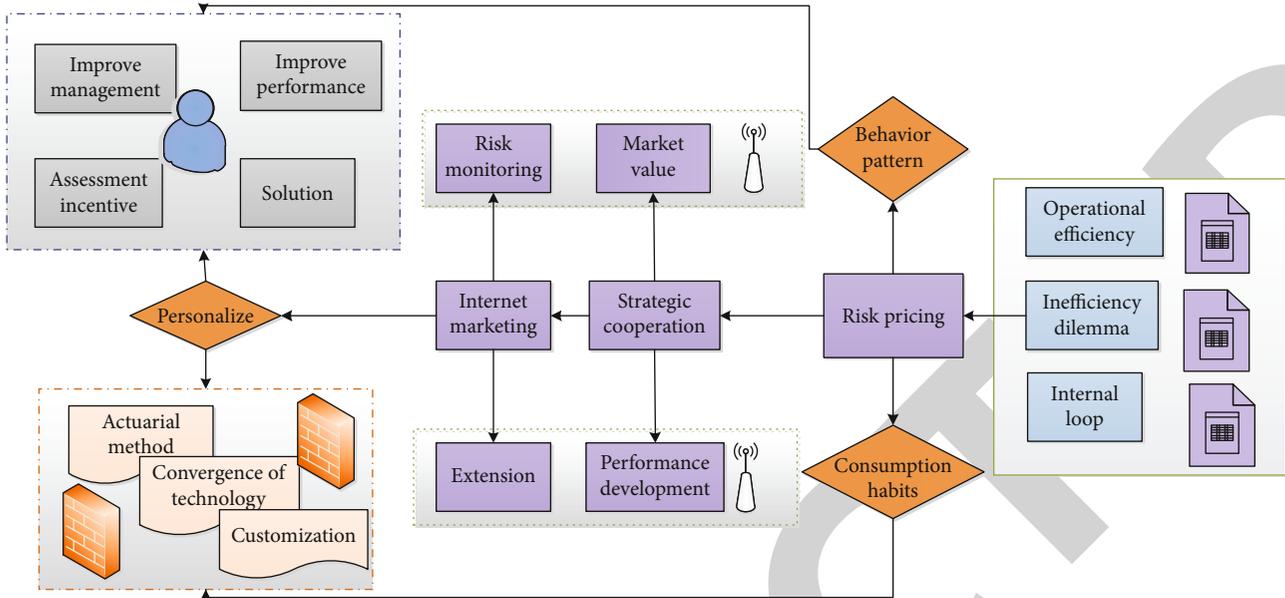


FIGURE 3: Blockchain marketing algorithm flowchart.

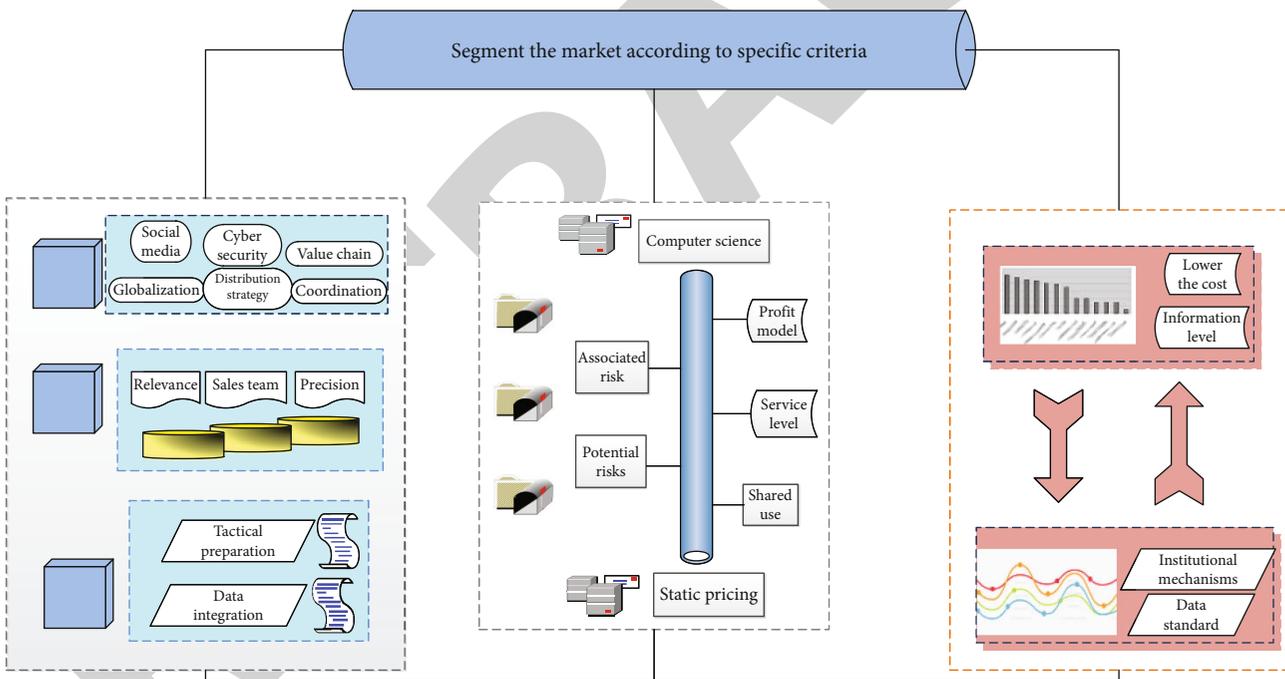


FIGURE 4: Framework diagram of the marketing model based on the financial blockchain of the Internet of Things.

the customer pays successfully, the policy will take effect immediately. The entire purchase process only takes 10 to 15 minutes, which is very fast. According to the company's internal staff, about 90% of customers can quickly apply for insurance through self-service.

The remaining 10% of customers are likely to have a more complicated medical history, at which time manual services will be involved. From the perspective of improving customer experience in Figure 5, marketing innovation can effectively improve work efficiency and reduce business costs. It is one of the most direct innovation paths for all financial

blockchain marketing companies to use technology to improve customer satisfaction.

4.2. *Statistical Analysis of Model Reliability.* Specifically, for a specific financial blockchain marketing customer and financial blockchain marketing business scenario, a three-dimensional customer relationship management matrix can be built, as shown in Figure 6. The 4C theory focuses corporate marketing on consumers and redefines the four elements of marketing: Consumer, Cost, Convenience, and Communication. It is pointed out that the first task of an enterprise

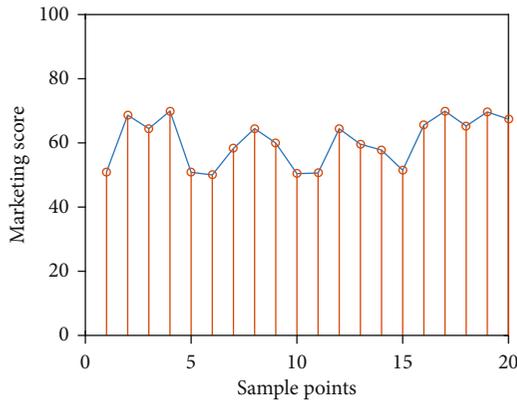


FIGURE 5: The performance of the IoT marketing model.

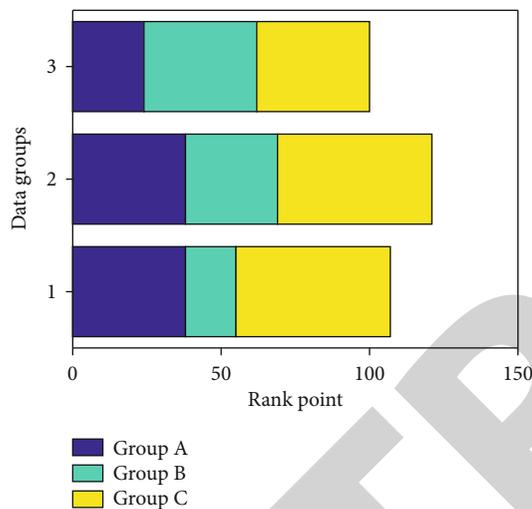


FIGURE 6: Stacked histogram of the evaluation scores of different groups of the model.

should be to pursue consumer satisfaction and then to strive to reduce the customer's purchase cost and continue to pay attention to and improve the convenience of customers when purchasing products. In the system architecture of the blockchain, many innovative technologies are covered. Among them, the nontamperable chain data structure, the consensus mechanism of the distributed network, and the flexible and operable smart contract are the representative key technologies. Group A is the classification of customers, which can be divided by value contribution, family structure, and age group; Group B is the customer's life cycle, and major nodes include the actual age of the customer and major family events, such as marriage, childbirth, and children's marriage; Group C is the life cycle of an insurance policy, including the entire period from the customer's contact with the financial blockchain marketing to the consideration of whether to insure, to the payment of premiums in the subsequent period after the policy becomes effective, changes in preservation, processing of claims, survival benefits, and surrenders. All actions that may occur during the life cycle of the policy are based on the policy.

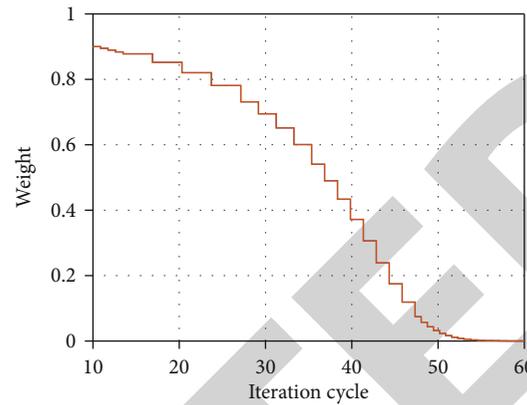


FIGURE 7: Ladder diagram of model weight changing with the number of iterations.

Under this preferential policy environment, the national online retail sales increased significantly in Figure 7, a year-on-year increase of 33.3 percentage points, and the total amount reached 3.9 trillion; of which, the online retail sales of physical and nonphysical goods were 82% and 18%, respectively, with a year-on-year increase of 31.6% and 42.4%. Among the total retail sales of consumer goods, online retail sales of physical goods accounted for 10.8%. All these indicate that the consumption mode of Chinese residents has shifted from traditional consumption to online shopping, in which e-commerce plays an important role. In addition, the shortage of technical talents is also a major technical risk faced by the marketing technology innovation of financial blockchain. According to a survey by PricewaterhouseCoopers (PwC), 87% of financial blockchain marketing industry respondents feel that they have difficulties in hiring and retaining talents with corresponding innovative skills.

Among them, L server shipments in the four-way and eight-way markets reached 23% and 54%. The market targeted by ERP products is mainly the corporate market, and the core target customer group is group companies. Due to the impact of the financial crisis in recent years, the corporate market has been in a downturn. ERP vendors, especially their competitors, have suffered losses in the past two years. With the advantages of the group's brand, management, and products, L International maintains an annual growth rate of 30%. In it, China's software business revenue was 475.1 billion yuan, a year-on-year increase of 29.6%. In the software ranking, L software business revenue ranked fifth in China. The software business of the top four companies is not in competition with the software business of the L Group, while UFIDA ranks 39. Some of financial blockchain marketing industry respondents chose "very difficult," compared to only 28% of banking industry respondents. In the past, it took as long as one year to develop a product from conception to completion. The nodes in the network are dynamically divided into several clusters, and each cluster is composed of a cluster head node and several common cluster member nodes. Nowadays, by implementing development strategies to determine product positioning and quickly locate customer portraits, the development cycle can be shortened to

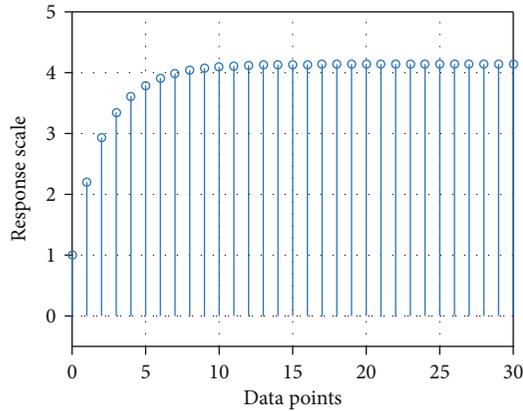


FIGURE 8: Match stick diagram of model response rate.

three months. The increase in the express delivery of individual product development means an increase in the number of product developments throughout the year. This plays a vital role in the Internet era where rapid product iteration is emphasized.

At the same time, the experience of developing customized products through cooperation with third-party channels is applied to the development of its own products in Figure 8, making the products more in line with customer needs and avoiding the disconnection between its own products and market demand. Offline traditional insurance usually takes 5-7 days, and it also takes a lot of time for the agent to communicate, but using WeChat to apply for insurance can reduce this time to 2 minutes, and the claim settlement time from the longest 10 days to the shortest 30 minutes, the processing time for security services was shortened to 5 minutes, 75% of claims cases were closed on the same day, and the average time limit for claim services was 2 days. And the online insurance model can effectively avoid misleading sales.

4.3. Example Application and Analysis. The current customer base of L server is mainly the government market, and the enterprise market has been included in the official market mission since 2019. The market research company IDC released China's X86 server market data. The data showed that the total sales of China's X86 servers was 1,474,828 units, a year-on-year increase of 12.6%. Domestic manufacturers surpassed foreign countries with a 61% market share for the third consecutive year. It can be seen from Figure 9 that the share of international IT vendors in the X86 server market has gradually decreased for four consecutive years, from 53% to 39%. The market share of domestic manufacturers has increased year by year. It was 47% and 61%, indicating that the competitiveness of domestic manufacturers is increasing year by year. Domestic servers are gradually expanding their share in the Chinese server market. Among them, the cluster head node records the information of the members in the cluster and other related information of the cluster head. When searching for the target node for communication, it is first to search in the cluster. If it is not found in the cluster, it will search in other clusters through the cluster

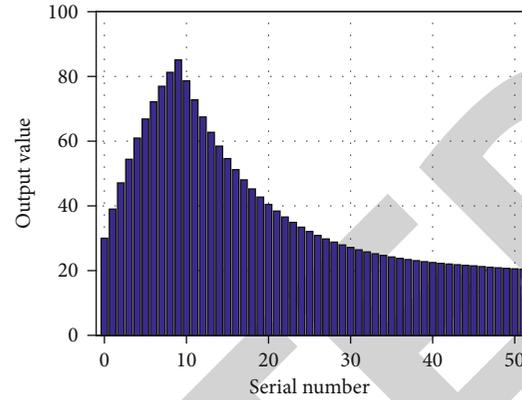


FIGURE 9: Distribution of the output value of the marketing model with the number of sequences.

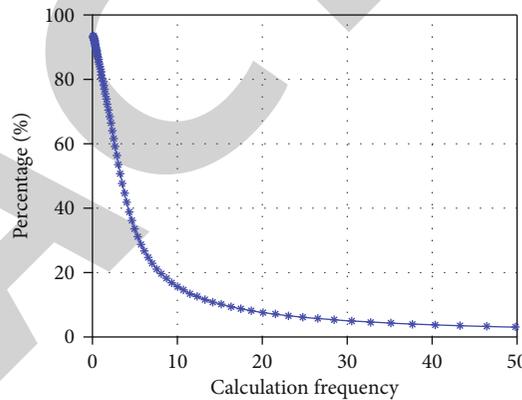


FIGURE 10: The dependence curve of the proportion of the blockchain with the calculation frequency.

head. Market research company Gartner announced the server market research report for the third quarter. According to data, global server shipments in the third quarter increased by 1% year-on-year to 2.53 million units, and the growth was sluggish; in the global regional market, only the shipment volume of the Chinese market maintained growth, with a year-on-year increase of 15.63%. In the third quarter, China became the only bright spot in the global service provider market and the only driving force for the growth of global server market shipments.

It can be seen from Figure 10 that in the third quarter, the growth rate of local brands in the Chinese server market was higher than that of foreign manufacturers, and the advantages of domestic manufacturers have further emerged. In the third quarter, in the top five server markets, the three domestic manufacturers L Group, Huawei, and Lenovo ranked second, third, and fourth, respectively. Dell maintained its position in shipments with a slight advantage, while HP ranked fifth. In the third quarter, local companies further encroached on foreign companies.

At present, in the domestic group management software market, the concentration of the Chinese group management software market continues to increase, with domestic companies occupying a dominant position. It can be seen that

domestic management software companies represented by L Group and UFIDA have won the trust of group corporate customers with their high-quality services and advanced products. The top ten vendors occupy 79.3% of the market. To sum up, although the L Group has separate competitive positions in the server and ERP markets, as the only domestic IT vendor that integrates software and hardware, it is beyond the reach of other domestic companies in terms of overall solution services. It should be noted that the cluster head is variable. According to the dynamic changes of the network, such as the new node joining, the original node exiting, and the contribution ability and other factors, the roles of the cluster head and members in the cluster will change accordingly. As customers pay more attention to overall solutions, the overall competitive advantage of the L Group has become more and more obvious. As a link between the company and customers, the L Group call center plays an irreplaceable role in sales and service performance. The business opportunity signing performance and customer service department service revenue generated by the L Group's call center server product line accounted for 15% of server sales. The business opportunity signing business generated by the ERP product line and the service revenue generated by the online support department accounted for 22% of the ERP product sales. Therefore, with the rapid progress of L Group's performance and the vigorous expansion of the market, the call center is bound to keep up with the development of the group's market.

5. Conclusion

This article starts from the application practice of blockchain, artificial intelligence, Internet of Things, big data, cloud computing, drones, and other modern technology elements in the marketing industry of financial blockchain. On the basis of the existing literature, the connotation of marketing technology of financial blockchain will be redefined. It explored the process, innovation logic, and basic principles of the marketing technology innovation and development of international and domestic financial blockchain under the guidance of innovative ideas. Following the innovation logic and basic principles, the paper focuses on the application path of financial blockchain marketing technology innovation, expounds the new risks that financial blockchain marketing technology innovation may face, and puts forward several corresponding risk control recommendations. The research in this article has two practical significances: one is to propose a set of practical solutions for the improvement of marketing management strategies of the L Group call center. In the context of the continuous growth of the IT market, by strengthening the marketing management of the L Group's call center, the L Group's ability to serve customers and the ability to accurately grasp customer needs are promoted, and it improves marketing capabilities and profits, so that the call center can play for the L Group greater market value; in other words, the L Group is a typical representative of the domestic IT industry. The research in this article can provide reference for the marketing management of call centers for IT-type

peer companies or B2B companies that trade between companies.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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