

## Research Article

# Complexity Construction of Intelligent Marketing Strategy Based on Mobile Computing and Machine Learning Simulation Environment

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Mankind's research on marketing has a history of hundreds of years, and it has been fruitful in continuous summary and research. Now the theory of marketing has gradually penetrated into the minds of every company and even individual. A successful marketing strategy is the inevitable result of scientific planning and effective implementation. However, the current marketing strategy has gradually failed to meet the needs of corporates. In order to find the best solution for corporate marketing strategy, we built a simulation environment based on mobile computing and machine learning and compared the differences by simulating several companies of the same size in this city (corporate efficiency and revenue and expenditure under the marketing strategy). The results of the study found that intelligent marketing based on machine learning is more suitable for enterprises than general marketing strategies. The efficiency of enterprises has increased by about 20%, and the income of enterprises has increased by more than 30% compared with traditional marketing strategies. This shows that the intelligent marketing strategy based on mobile computing and machine learning to build a simulated environment plays an extremely important role in the peculiarities.

## 1. Introduction

Marketing theory was born in the United States in the twentieth century, in the new round of the global technological revolution, the collective technological revolution characterised by the intellectual and ubiquitous shaping of the industrial structure, and changing national power. Intelligent productivity represented by big data, cloud computing, and artificial intelligence is advancing by leaps and bounds. Marketing is particularly important [1]. Marketing strategy is very important to modern enterprises, and it is a bridge and link connecting enterprises and markets. In the age of the knowledge economy, marketing strategies play a key role in opening up new markets, meeting the needs of market customers, and improving basic competitiveness of enterprises. Over the past 30 years of reform and opening up, China's economy has made significant achievements. The

most obvious change is from the shortage of commodities in the past to the abundance of materials. Commodity transactions have changed from a seller's market to a buyer's market [2].

With the rapid change of today's market economy, competition has become increasingly fierce for companies. How to stand out in the current fierce market environment is a problem that every company must face directly. And the marketing strategy of the enterprise plays an important role in solving this problem. What is marketing? The concise definition of marketing is "satisfy others and obtain the profits they want to achieve" [3]. In a sense, marketing has an important impact on the entire society. At the same time, marketing is a combination of science and art. It acquires customers, maintains customers, and promotes customers through various methods such as market segmentation, market placement, and target market selection. Enterprise

marketing strategy is a crucial link in the process of an enterprise. Faced with the ever-changing market environment and complex customer needs, if an enterprise wants to gain a competitive advantage in market competition, it must maintain a keen sense of the market. Opportunities, identify the breakthrough, formulate marketing strategies that adapt to the company's own, and meet the ever-changing needs of consumers, in order to defeat competitors and win in the fierce competition [4]. For smart marketing strategies, experts at home and abroad have done a lot of research. Liu Jing believes that machine learning by data mining can effectively help people judge massive amounts of information. With time, the role of data mining has become more and more obvious. He believes that machine learning can be combined with data through data mining. Combine mining to improve people's grasp of information [5]. Dong believes that with the popularization of artificial intelligence, traditional identification is vulnerable to unique infringements. He believes that edge computing can be introduced into traditional cloud servers through edge computing to reduce the number of communications between servers and users. Improve the security performance of the [6]; Le believes that intelligent marketing can provide extremely important support for the future of enterprises. In the article, he detailed the characteristics of intelligent marketing, the operation mode, and the advantages of comparing other computing methods [7]. Zheng believes that with the rapidness of information, knowledge is the first contribution to the promotion of human society. How to arrange people with different roles in suitable positions and mobilize their work enthusiasm to realize their potential is the optimization of human resources management. The most important issue is that it uses the relevant theories of marketing strategies to introduce the meaning of marketing strategies and the methods of intelligent marketing and discusses the important role of marketing strategies for the of enterprises [8]. These studies have a certain reference value for this article, but due to the narrow data cited in the research, the data industry is basically limited to individual industries, and it is difficult to play a universal role.

This article applies the latest intelligent marketing strategy theory to fully state the status quo of the company's marketing strategy. Based on portable computers and mechanical learning, there is an attempt to investigate a specific plan for the creation of a smart marketing strategy for a related company reporting unit. In-depth analysis of the

current status of the company's leading marketing strategy and putting forward relevant countermeasures and suggestions based on the analysis conclusions is crucial to help similar companies build a more competitive intelligent marketing, so as to better help the company's growth.

## 2. Research Method of Intelligent Marketing Strategy in Simulated Environment

*2.1. Machine Learning.* Mechanical learning can discover the basic laws between data and discover valuable resources from data [9]. Therefore, machine learning is widely used in data analysis and data mining.

The so-called machine learning is based on a lot of prior experience and posterior experience to make a prediction of a problem; this kind of prediction includes classification problems and regression problems. It is committed to solve the problem of using a lot of experience to improve the performance of the entire prediction, so that it can successfully complete the task and meet the target requirements [10]. Because of the enormous amount of calculation required for mechanical learning, it is unrealistic and impractical to rely solely on individuals for the calculation, so it is necessary to use computer assistance. In computer, what people call 'experience' is actually a set of disorganized data. What machine learning needs to do is to use algorithms to generate models from the appealed experience and then use the generative models to achieve what needs to be done (the function of [11]).

For a machine learning algorithm, in order to verify the pros and cons of the algorithm and whether the algorithm can successfully solve people's problems, it must pass the evaluation and test of the model. Under normal circumstances, the overall sample will be classified into two categories: one is classified correctly and the other is classified incorrectly [12]. We call the ratio of the number of samples judged to be positive examples to the total number of samples as the "model error rate", assuming that there are  $m$  total samples and  $n$  error samples; then, the sample error rate is defined as

$$E = \frac{1}{m} \left[ \sum_{i=1}^n \sum_{j=1}^j x^j \log(h_g(x^j)) \right]_j + (1 - y_j)^{\lambda} + \frac{\lambda}{2m} \sum_{l=1}^{L-1} \sum_{i=1}^l \sum_{j=1}^{s_j+1} (\theta_{ji}^l)^2. \quad (1)$$

Sample correct rate

$$P = 1 - E = 1 - \frac{1}{m} \left[ \sum_{i=1}^n \sum_{j=1}^j x^j \log(h_g(x^j)) \right]_j + (1 - y_j)^{\lambda} + \frac{\lambda}{2m} \sum_{l=1}^{L-1} \sum_{i=1}^l \sum_{j=1}^{s_j+1} (\theta_{ji}^l)^2. \quad (2)$$

The backpropagation algorithm is adopted to solve the difference of the first batch of data at the beginning, then use this difference to iteratively adjust the weight of the previous network until the penultimate layer, and then adjust the weight value of each layer through the error.

$$\delta = (\mu^2)^t \phi^{3*} g'(z^3). \quad (3)$$

In general, the difference between the predicted result of the model learning the mechanical learning algorithm and the initial result of the overall sample is called an error. In machine learning, there are not only one error, but many

kinds of errors. The model error learned from the mechanical learning algorithm in the training set is called “training error” or “experience error” and the model error learned from the mechanical learning algorithm in new samples other than the aggregate sample is called a “generalisation error” [13]. For a good machine learning algorithm, we hope that its generalization error is small, so that it can play a good role in new samples, but, in general, we do not know the distribution of new samples. So what we can do is to make the training error smaller [14].

For mechanical learning algorithms, the most widely used crisis methods shall include, in particular, the interruption method, the validity method, and the self-service method. The retention method is to divide the data set into two mutually exclusive subsets, and these two subsets can be assembled into a whole set. Separate the two sets into two parts: the verification set and the learning set. The two sets should maintain the consistency of data distribution to prevent the introduction of additional errors from causing unnecessary errors to the final result. When using the leave-out method, it needs to be used multiple times, and then the average value of the multiple results is taken as the final result [15].

Let  $\phi(x)$  denote the feature vector after the sample is transformed into the high-dimensional space; then, the classification hyperplane in the high-dimensional space can be expressed as

$$w^t \phi(x) + b = 0. \quad (4)$$

The problem to be solved becomes

$$\min_{w,b} \frac{1}{2} |w|^2, \quad (5)$$

$$s.t. y_i (w^t \phi(x_i) + b) \geq 1, i = 1, 2, \dots, m.$$

For such a mapping from low-dimensional space to high-dimensional space, the dimensionality of the mapped space may be very high, so the calculation is very difficult, and the calculation process can be simplified:

$$k(x_i, x_j) = \langle \phi(x_i), \phi(x_j) \rangle = \phi(x_i)^t \phi(x_j). \quad (6)$$

**2.2. Marketing Strategy.** Products are an important part of an enterprise to meet customer needs and create profits for the enterprise, and it is the core content of an enterprise’s competitiveness. A successful company must have good products, but not all companies with good products are successful. It also depends on the company’s marketing strategy and internal management. This shows the importance of a company’s product strategy [16]. The content of strategic product research mainly includes new products: determination of the overall image of the product, extension of the product life cycle, and operation of the product.

- (1) The overall image of the product: the components of the overall concept of the product include core products, tangible products, and additional

products. The core product can meet the basic needs of customers; the tangible product is the entity of the product, which is represented by the product’s packaging, appearance, brand, and other information; the additional product refers to the sum of all additional benefits other than the core product, including installation, maintenance, transportation, and training [17].

- (2) Product life cycle and strategy.

The life cycle of a product refers to the entire time it takes for a product to be successfully put into the market after research and to be eliminated by the market, including the research and period, the intervention period, the growth period, the maturity period, and the decline period.

- (1) The characteristics of the import period on the market are customers do not understand new products, products have high distribution costs, customers are sensitive and unstable to prices, competitors enter easily, and potential market demand is high. The strategy adopted at this stage is from slow penetration to fast penetration, from slow looting to fast looting [18]. The price of the product goes from low to high, and the cost of publicity is also a process from low to high.
- (2) Product growth period market strategy: the characteristics of the product growth period are the increase in product sales and the continuous decrease in costs. The corresponding strategy is to improve and perfect products, find new market segments, establish a strong product image, strengthen advertising, and reduce prices when appropriate.
- (3) Market strategy during the product maturity period: the product maturity period is characterized by a slowdown in sales growth and the influence of competitors’ intervention. The corresponding strategy is to explore news of products and open up new market segments; product improvements, including quality, packaging, functions, and services, etc.; and improvement of the marketing mix, including increased sales channels, price reductions, and promotions.
- (4) Market strategy during product recession period: product recession period is characterized by a rapid decline in sales. Corresponding market strategies can adopt maintenance strategy, concentration strategy, contraction strategy, and abandon strategy.

With the rapid change of the Internet industry, people have become more and more aware of global integration. As long as you sit at home and turn on your computer, connect to the Internet, you can buy your favorite things without leaving your home through Taobao, JD, Amazon, and other online shopping malls [19]. At the same time, you can also provide a certain reference to yourself through the buyer’s comments. The price comparison is easier, and it becomes extremely easy to buy goods with a high credit-to-price ratio. While consumers enjoy the ease caused by the rapidness of

the Internet, businesses face another serious test. The business environment in which companies are located has become more open and transparent, and market competition has become more fierce: for example, competitors can easily learn about your company's product information, company marketing strategies, and important information about core members [20]; it is also easy to find your competitors and understand the price, quality, service, and other related information of related substitutes. Therefore, companies must learn to adapt to changes in the environment in the era of abnormally developed information and make correct judgments and decisions. The situation analysis method can help companies to analyse the opportunities and threats created by the external environment, to recognise their own advantages and disadvantages and develop corresponding marketing strategies [21].

Analysis of the external environment can help companies properly understand opportunities and threats in a competitive market and find their own opportunities in the market. The content includes macro environment analysis, industry analysis, competitor analysis, and macro environment analysis includes political and legal environment, economic environment, social and cultural environment, scientific and technological environment, population environment, natural environment, and other major event environment, among which the most important influences on enterprises are the policy and legal environment, scientific and technological environment, social and cultural environment, and economic environment [22]. Opportunities are in front of us, and opportunities are fleeting. How can we effectively seize the opportunities? This requires companies to be prepared, analyze their internal environment, maximize their strengths and avoid weaknesses, and optimize processes. The internal environment of a lubricating company mainly includes R&D capabilities, production capabilities, financial strength, sales capabilities, service capabilities, process optimization capabilities, cost control capabilities, and intellectual property rights. Only by properly recognising the company's internal advantages and disadvantages can we make targeted corrections, build stronger corporate competitiveness, respond to threats to the external environment, exploit potential market opportunities, and continue to develop and gain a strong position in competition (advantage [23]).

**2.3. SWOT Analysis Method.** The marketing environment of an enterprise includes internal environment and external environment [24]. The market types are relatively rich. Market segmentation means that companies divide the entire market into different submarkets on the basis of user needs, consumer habits, consumer behavior, and other differentiated features. The user demand trends in the same market segment should be similar [25]. Therefore, market segmentation should first determine the product market scope of its own products in related industries and then find the needs of target users and determine the common points of demand. The relevant submarkets after market segmentation are more detailed, and it is easier to find the needs

of users [26]. This can enable companies to produce products that meet market needs, thereby improving their own benefits. As the saying goes: knowing yourself and your opponents will never end in a hundred battles. Only when a company has a deep understanding of its internal and external environment can it accurately position itself, understand its competitors, grasp and correctly predict market trends, and be able to take the lead in the fierce market competition. The SWOT analysis method is a method to objectively and accurately analyze and study the actual situation of an organization [27]. It is generally calculated according to the following method:

$$\frac{a^2 R}{at^2} = b_o^2 \left[ 1 + \frac{w''}{w'} \frac{au}{ad} + \dots \right] \frac{a^2 R}{ad^2}. \quad (7)$$

Among them is the displacement of  $R$  particle relative to time  $t$ ;  $d$  is the distance of propagation. In this study,  $d$  is the length of the sample, the second and third order elastic constants, and  $b_{o2}$  is the velocity. Equations related to the elastic constants of nonlinear parameters:

$$\eta_2 = \frac{w''}{2w'}. \quad (8)$$

Variants of nonlinear motion equations:

$$\frac{a^2 R}{at^2} = b_o^2 \left[ 1 - 2\eta_2 \frac{au}{ad} + \dots \right] \frac{a^2 R}{ad^2}. \quad (9)$$

The solution of the equation is

$$R = R_1 \cos(qx - wd) - \frac{1}{4} \eta_2 q^2 R_2 x \sin 2(qx - wd) + \dots \quad (10)$$

The relationship between  $R_2$  and  $R_3$  can be obtained:

$$R_2 = \left( \frac{\eta_2}{4} \right) d^2 R_1^2 x, \quad (11)$$

$$R_3 = \left( \frac{\eta_2^2}{8} \right) d^4 R_1^3 x^2.$$

When encountering obstacles,  $A_1$ ,  $A_2$ , and  $A_3$  represent the operating efficiency of enterprise resources, respectively:

$$\frac{A_2}{A_1^2} = \left( \frac{\eta_2}{4} \right) d^2 x. \quad (12)$$

Adopting this method of decision-making is to compare the advantages, disadvantages, competition, and challenges of one's own company and competitors and comprehensively consider whether the strategy formulated by the company is feasible. According to the specific situation of the enterprise, to determine the ideal management width, the endogenous motivation of the flat management mode of the enterprise lies in the continuous improvement of the personal ability of the manager. Flat design, scientific job assignment, flat management of enterprise managers to enrich front-line staff, revitalize existing human resources, solve the contradiction between redundancy and shortage, improve



corporate executives' sense of responsibility and work initiative, reduce risks, and improve the quality and efficiency of corporate collection and management, and the promotion of modernization of corporate management are inevitable trends in corporates.

### 3. Intelligent Marketing Strategy Research Experiment

**3.1. Purpose of the Experiment.** This article makes full use of the research results of mobile computing and machine learning and takes the realization of the company's sustainable resources as the starting point. Through in-depth research on the company's marketing strategy status and existing problems, it simulates the company's marketing strategy optimization configuration. Marketing puts forward feasibility and scientific opinions to help companies build a more competitive system and promote the improvement of their market competitive position.

**3.2. Establish a Model Evaluation Index.** Definite conclusions can be drawn through actual observation of the object. Generally speaking, the evaluation index includes three levels of evaluation indexes: they are the relationship between gradual decomposition and refinement. Among them, the first-level evaluation indicators and the second-level evaluation indicators are relatively abstract and cannot be used as a direct basis for the evaluation. The third-level evaluation indicators should be specific, measurable, and behavior oriented and can be used as a direct basis for teaching evaluation.

Full methods of quantitative and qualitative analysis: quantitative analysis is the analysis of the data of the problem, using the intuition and clear substance of mathematics to reflect the existence of the problem; qualitative analysis is to collect, read, and organize relevant domestic and foreign research literature and summarize the related theoretical results. The evaluation criteria of green supply chain performance are complex and diverse, including not only financial standards but also other nonfinancial standards. Some standards cannot be directly analyzed by quantitative methods, but can only be evaluated by qualitative analysis methods. The performance evaluation standard of the company uses a combination of quantitative and qualitative analysis methods to construct and at the same time provide formulas for standard calculations and evaluation standards.

**3.3. Determine the Evaluation Weight.** The weight of the indicator is a numerical indicator of the importance and function of the indicator. In the of indicators of the evaluation plan, the weight of each indicator is different. Even if the indicator level is the same, the weight is different. Index weight is also called weight and is usually represented by  $a$ . It is a number greater than zero but less than 1, and the sum of the weights of all first-level indicators must be equal to 1, that is, satisfy conditions  $0 < a < 1$  and  $\sum a = 1$ .

**3.4. Statistics.** All data analysis in this article uses SPSS19.0, statistical test uses two-sided test, significance is defined as 0.05, and  $p < 0.05$  is considered significant. The statistical results are displayed as mean  $\pm$  standard deviation ( $\bar{x} \pm S.D$ ). When the test data complies with the normal distribution, the double  $T$  test is used for comparison within the group, and the independent sample  $T$  test is used for comparison between the groups. If the regular distribution is not sufficient, two independent samples and two related samples will be used for inspection.

### 4. Experimental Analysis of Intelligent Marketing Strategy Research

**4.1. Status of the Company.** We conduct statistics on the status quo of the company under the current marketing strategy of the company and conduct statistics on the company's expenditure, income, efficiency, customer retention, etc. in recent years, as shown in Table 1.

It can be seen from Figure 1 that under the current marketing strategy of the company, the data has basically reached the passing level, with an average value exceeding 1.5. However, the overall expenditure of the enterprise is relatively high, with an average value of about 2.0. This shows that the current marketing strategy has a certain effect on the attraction and retention of customers, but the cost is relatively high. For companies, it is not the optimal marketing strategy. We classify the main customer groups of these companies, as shown in Table 2.

It can be seen from Figure 2 that among the five companies, the age and gender distribution of main customers are not very different, and the main customers are between 18 and 35 years old. This is because people in this age group are generally receiving information quickly. The stage of strong learning ability is the main age group of customers that enterprises need to attract. The male to female ratio of corporate customers is generally around 6.5:3.5, and the ratio of male to female in the fourth company is around 5:5, indicating that the company's customer groups are more evenly distributed.

**4.2. Staff Allocation.** We have made statistics on the company's staff allocation in recent years, compared the changes in staff allocation and changes in corporate benefits, and obtained the connection between staff allocation and corporate marketing strategies. The details are shown in Table 3.

From Figure 3, we can see that under the current corporate marketing strategy, the matching effect of corporate employees is not very satisfactory. The average score is only about 50, which cannot meet the needs of the corporate. We have carried out relevant statistics on the allocation of employees in different companies and compared their efficiency differences and their impact on corporate benefits, as shown in Table 4.

From Figure 4, we can see that the configuration efficiency of employees in different companies is different, but the configuration efficiency is not high; all are around 1, and only a few items reach 2 or more. This shows that the

TABLE 1: Current status of enterprises in recent years.

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Business income	1.86	1.86	1.93	2.02	1.89	2.39	2.04	2.38	1.86
Business spending	1.92	2.34	2.3	2.17	2.12	2.31	2.24	2.1	2.3
Work efficiency	2.21	1.88	2.41	2.25	2.39	2.07	2.39	2.33	2.43
Customer satisfaction	2.43	2.29	1.92	2.09	2.06	2	2.26	1.96	2.18
Customer retention	1.9	1.86	2.5	2.42	1.82	1.98	2.43	1.99	2.26

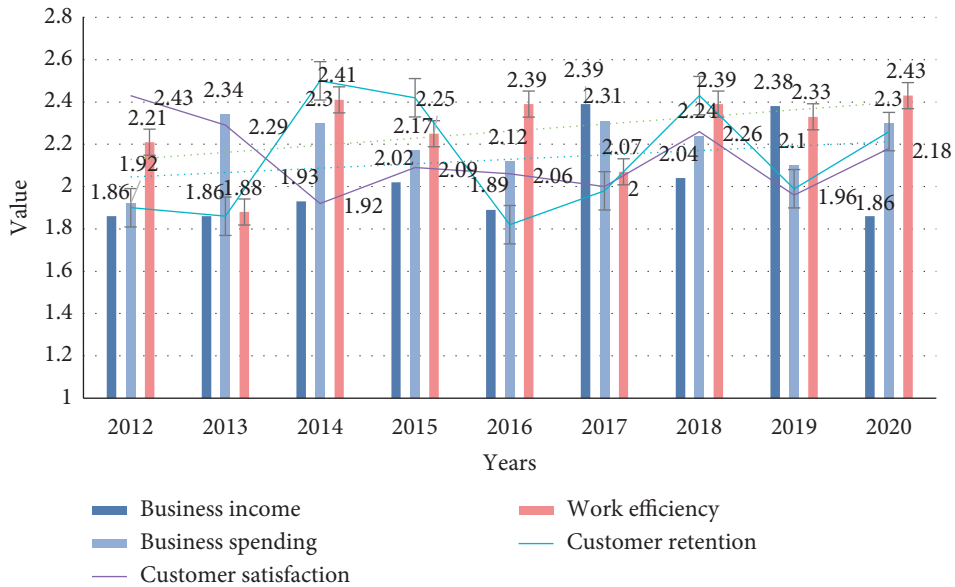


FIGURE 1: Enterprise status.

TABLE 2: Enterprise customer classification.

	The first company	The second company	The third company	The fourth company	The fifth company
18-28	27	33	38	29	31
29-35	25	27	36	24	34
36-48	33	22	29	17	31
49-60	19	17	13	16	17
Male	75	66	72	49	69
Female	40	45	38	47	42

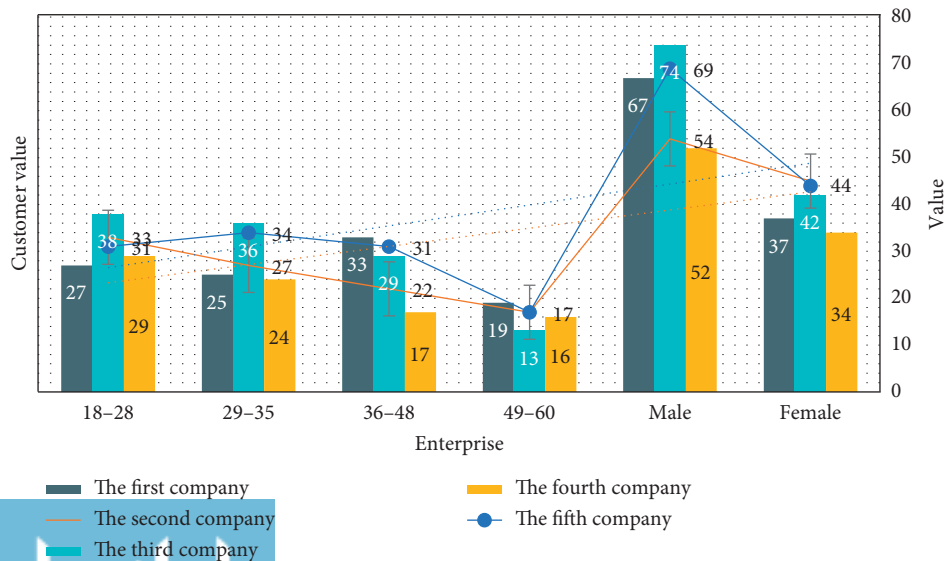


FIGURE 2: Distribution of employees in different companies.

TABLE 3: Executive compensation.

	2015	2016	2017	2018	2019	2020
The first company	42.7	47.9	41.3	43.5	39.8	41.2
The second company	42.8	49.3	46.7	45.5	43.7	46.5
The third company	50.3	47.9	48.4	50.7	52.4	51.3
The fourth company	55.6	52.9	49.4	53.6	51.5	53.7
The fifth company	49.5	51.8	53.6	57.7	60.2	59.8

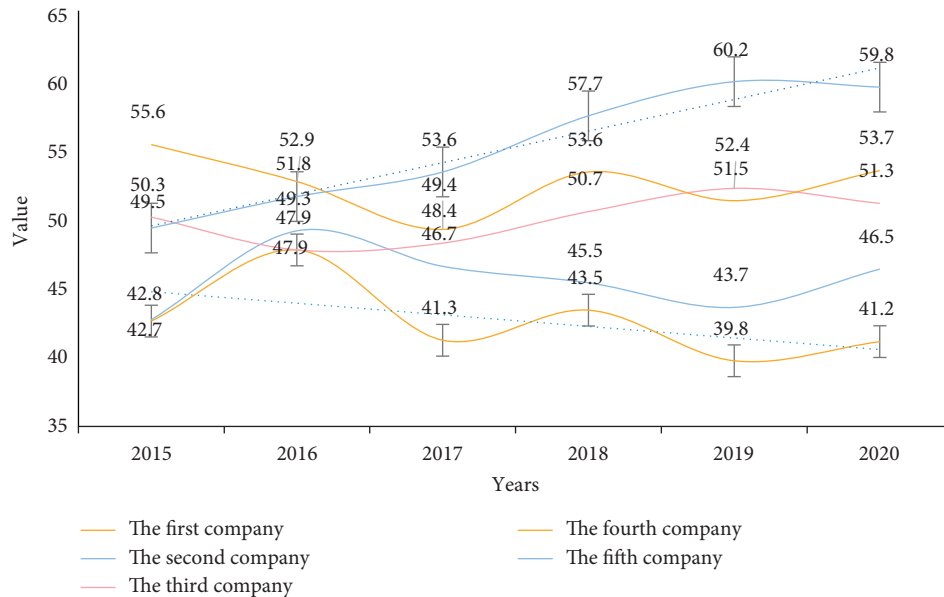


FIGURE 3: Listed company governance efficiency.

TABLE 4: Executive compensation.

	Company size	Company surplus	Assets and liabilities	ROE	Cash flow	Incentive efficiency
The first company	0.9	2.36	2.49	1.12	1.6	2.08
The second company	1.37	1.36	1.67	1.77	1.24	1.29
The third company	1.46	2.48	2.23	1.33	1.01	1.78
The fourth company	1.92	1.54	1.87	2.41	1.87	1.27
The fifth company	1.57	1.21	2.3	2.12	0.81	1.97

company does not play the role of employees reasonably and needs to adjust the company system. The marketing strategy of the company makes the employees' initiative performance plays out.

**4.3. Comparison of Marketing Methods.** We conducted simulation tests based on mobile computing and machine learning for these companies. Through simulation, we compared the changes between different marketing methods and related statistics, as shown in Table 5.

From Figure 5, we can see that after smart marketing, the company's various parameters have greatly improved, with the average value rising from around 2.3 to around 4.9 without changes in the scale of the company. We have made statistics on related growth, as shown in Table 6.

From Figure 6, we can see that based on intelligent marketing, the various values of the company have improved

to varying degrees, with an average improvement value of about 2 and an improvement rate of more than 30%. This shows that the intelligent marketing strategy based on mobile computing and machine learning has greatly improved the optimization of enterprise employees.

**4.4. Employee Satisfaction.** Employee satisfaction is a major factor affecting employee work efficiency. Therefore, we conduct related surveys on employee satisfaction in different marketing methods to understand the changes, as shown in Table 7.

From Figure 7, we can see that after implementing smart marketing strategies, employee satisfaction has improved to a certain extent. This shows that smart marketing based on mobile computing and machine learning can play a role and is a direction of corporate marketing.

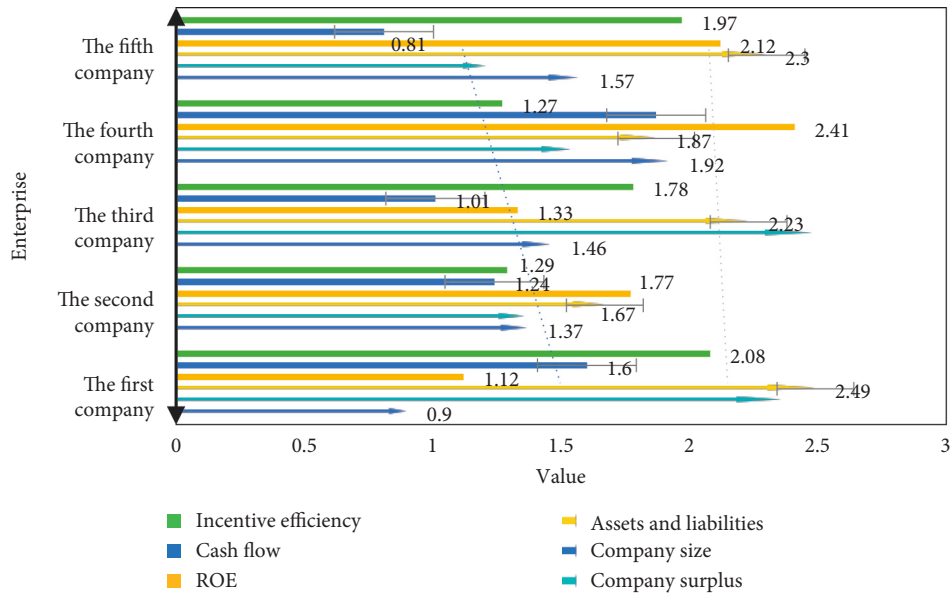


FIGURE 4: Listed company governance efficiency.

TABLE 5: Improved data.

	Company size	Company surplus	Assets and liabilities	ROE	Cash flow	Incentive efficiency
The first company	0.9	3.57	3.22	3.91	3.94	3.81
The second company	1.37	4.22	4.18	4.32	4.45	4.39
The third company	1.46	4.37	4.73	4.62	4.37	4.95
The fourth company	1.92	5.06	5.36	4.99	4.77	5.18
The fifth company	1.57	5.74	5.1	5.94	5.78	5.89

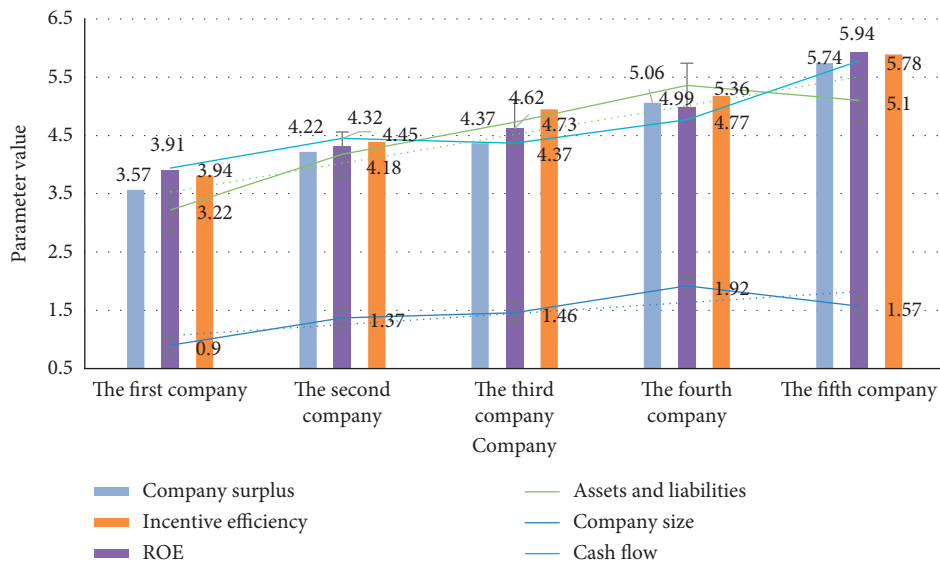


FIGURE 5: Improved employee configuration.



TABLE 6: Increase rate.

	Company surplus	Assets and liabilities	ROE	Cash flow	Incentive efficiency
The first company	2.11	2.16	1.88	2.33	2.24
The second company	2.27	1.94	1.91	1.88	2.09
The third company	2.07	1.85	2.43	2.25	2.1
The fourth company	1.8	2.35	2.19	2.23	2.16
The fifth company	2.39	2.32	2.29	1.81	2

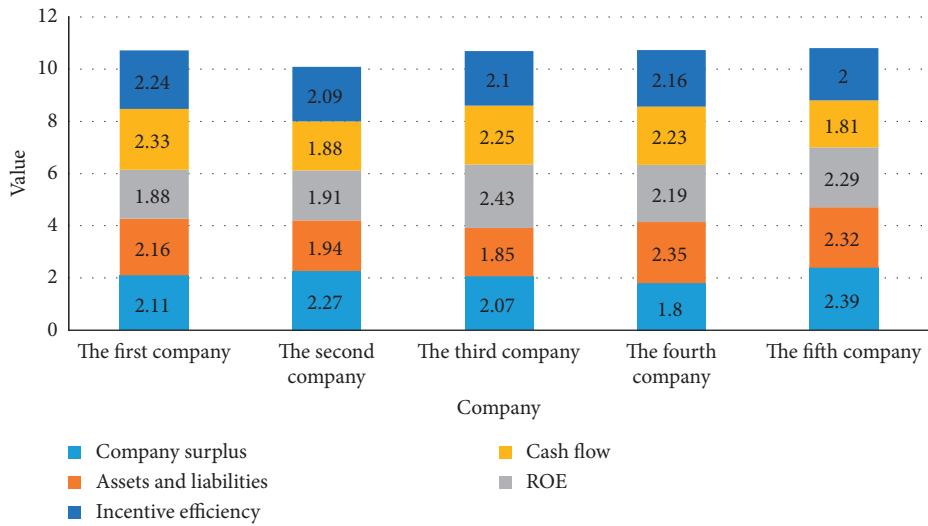


FIGURE 6: Staff allocation growth.

TABLE 7: Employee satisfaction survey.

	Employee satisfaction	Employee motivation	Redundant staff (%)	Person-post matching	Employee benefits	Business efficiency
Original configuration	0.432	0.392	2.7	0.493	0.514	0.521
Smart configuration	0.723	0.696	1.2	0.784	0.813	0.797
Best value	0.837	0.826	0.46	0.872	0.843	0.856

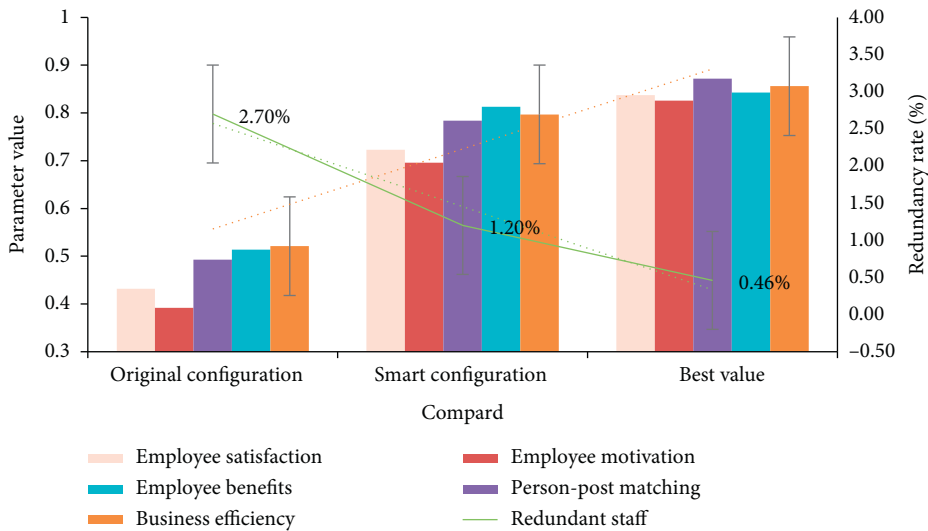


FIGURE 7: Optimized employee survey.

## 5. Conclusion

It is not enough for an enterprise to do things right. To develop, it must innovate. What is innovation? What others have not done in the past and will not or dare not do, if successful, is innovation. Of course, not every innovation will succeed and failure is allowed, but the risks must be controlled. Innovation is not an exception, but something that the company must do. Innovation includes many aspects like knowledge and marketing, as well as the introduction of new management and new and even more specific and small things. Only the path of innovation can continue to develop and ultimately defeat the opponent. Based on the concept of innovation, the company is guided by lean thinking to promote the level of basic management of the company; second is to build a corporate management organization structure based on lean thinking, gradually standardize the management authority of each unit, and comprehensively improve the company's management and control capabilities; third, gradually improve the company's various rules and regulations to improve the company's operational quality; the fourth is to speed up the construction of modern management informatization to provide management guarantees for the company.

In the age of big data, information is becoming increasingly important in today's economy. The way in which business information channels are expanded is an issue that every business urgently needs to address. With the continuation of the market economy, intelligent marketing has become an important way for enterprises to promote marketing. Enterprises should change their marketing concepts and create their own marketing network. First of all, companies must establish their own network sales channels and production chain supply s. Market segmentation for different customers and different needs is important. At the same time, a WeChat public account was established to promote the company's flexible packaging on the Internet, establish a positive image of the company, and pave the way for the company's brand.

This article is mainly based on marketing theory as the basic research data. Most of the data are rather messy. Some views are based on their own knowledge of the industry. They may fall into subjective consciousness and limit further research. Data sources are limited to certain books, websites, and internal companies, which may not match the actual situation and have not been further analysed to demonstrate the completeness, representativeness, and authenticity of the data provided.

## Data Availability

No data were used to support this study.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

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