System Optimization of Real Estate Enterprise Operation Mode Based on Internet Technology Analysis

Li Ma*

School of Manangement and Economics, Chuxiong Normal University, Chuxiong 675000, Yunnan, China 20210107106@cxtc.edu.cn *Corresponding author

Abstract: RE development is a complex speculation. State owned development companies are common, and China is no exception. State owned enterprises have played an important role in China's transformation to a market-based RE industry, but compared with private enterprises, we know little about the housing they are building. This paper analyzes the concept of Internet finance, the characteristics of RE network marketing and the role of the Internet in RE, and discusses the connotation of asset light operation mode of RE enterprises, the motivation of asset light operation of RE enterprises and the realization path of asset light operation mode of RE enterprises. This paper analyzes the background of the transformation of RE business model. The results show that RE enterprises have few financing channels and single source. Debt financing can improve the asset liability ratio of enterprises. With the implementation of the bank's tightening monetary policy, the financing difficulty of RE enterprises will increase, and there may be a risk of breaking the enterprise capital chain.

Keywords: Internet Technology, Real Estate, Operation Mode, Asset Light Operation

1. Introduction

Under the background of strengthening macro-control and tightening the scale of RE credit, RE enterprises are facing severe financial pressure. Financing capacity has become the decisive factor for the sustainable development of RE. There are many financing methods for domestic RE enterprises.

With the continuous progress of science and technology, many experts have studied the business model of RE enterprises. For example, monkkonen P, Deng g, Hu w used a comprehensive set of geo referenced housing transactions, combined with remote sensing data, neighborhood facilities and transportation infrastructure data, to analyze the dynamics of Chengdu housing market from 2004 to 2011. It is observed that changes in house prices and area have decreased, and the premium of larger units related to changes in government regulations has increased. It is found that the unit sales price set by state-owned enterprises is about 7% [1]. Su and Kegiang introduced ten common financing modes, briefly analyzed the advantages and disadvantages of each mode, and introduced three financing modes: personal entrusted loan, trust financing and asset securitization [2]. Li m, Shen L, Huang g Q proposed a multi-dimensional workflow model and gave the corresponding workflow operation mechanism to adapt to different business logic. In addition, through the integration of blockchain technology and agent technology, the design of resource blockchain aims to ensure the reliability of data, provide accurate front-line resource execution data for different customers, and make higher decisions. In order to validate the proposed BC WFO, a prototype system was also developed [3]. Although there are many research results on the operation mode of RE enterprises, there are still deficiencies in the research on the system optimization of the operation mode of RE enterprises based on the analysis of Internet technology.

In order to study the system optimization of RE enterprise operation mode based on Internet technology analysis, this paper studies the Internet technology and RE enterprise operation mode, and finds the weight index. The results show that Internet technology is conducive to the optimization of the operation mode system of RE enterprises.

2. Method

2.1. Internet Technology

2.1.1. Concept of Internet Finance

Internet finance cannot be simply regarded as the finance of Internet technology. It is based on Internet technology and superior to Internet technology. Its core is people, which is a new way of participation [4]. At present, there are different views on the concept of Internet finance. Scholars have different perspectives and emphases on their analysis, so that the concept of Internet finance has not formed a unified expression. Internet finance has greater advantages, higher transparency, wider participation, lower cost and more convenient operation; In addition, the mode of Internet finance has become more diversified and deepened to the core business of traditional finance [5].

2.1.2. The role of Internet in RE

The Internet is a free and efficient resource. RE enterprises cooperate with Internet enterprises, make full use of the Internet for design, management and sales, restructure and position the business of RE enterprises, and realize asset light transformation. In the design process, relying on Internet big data, mining potential customer demand information helps to meet customer personalized experience and highlight brand strength [6]. In terms of management, 020 channel is used to analyze the preference of consumption formats, timely and effectively adjust the layout of formats and improve the service level. In the sales link, the utilization rate of social software has increased year by year [7]. Accurate advertising can capture online customers and realize the combination of online and offline purchase mode. The efficient use of the Internet requires a strong innovative thinking and technical team, so as to change the operating efficiency of RE enterprises. The hottest topic is Internet plus. In the Internet era, if the RE industry wants to seek a breakthrough, it needs to introduce Internet technology [8]. The advent of the Internet era has greatly improved the financing capacity of these small and medium-sized developers and made the market more colorful.

2.1.3. Characteristics of RE Network Marketing

In recent years, Internet technology has gradually matured and spread to all corners of society. The RE industry is a capital intensive industry, which is becoming more and more skilled in the application of Internet technology. More and more developers are good at using the Internet as a publicity tool and sales tool, which greatly increases the possibility of RE sales [9]. With the help of network marketing means, publicize RE commodities and strengthen communication with customers. As the main feature of the RE online sales model is that businesses have direct contact with customers and omit the intermediate links, customers will feel that intermediary fees are saved and businesses can gain more customer trust. Through this sales model, customers are more willing to place orders. This sales model is simpler than the traditional marketing model, with lower sales cost, which helps to form a good interaction between customers and salespeople. This sales model is also conducive to improving the corporate image and making customers feel that the enterprise is more full of a sense of science and technology and modernity. A single marketing model cannot fully tap customers' consumption desire, and must be combined with a variety of marketing models [10].

2.2. Operation Mode of Real Estate Enterprises

2.2.1 Connotation of Asset Light Operation Mode of RE Enterprises

In order to more fully implement the asset light operation mode, the RE industry should pay attention to external resources, which is also the core concept of the operation mode. On the basis of making full use of external resources, reduce the capital investment of enterprises in various business links and reduce the capital pressure faced by enterprises. Enterprises can also invest more intensively in high return areas to obtain higher returns [11]. Through this operation mode, the RE industry can realize the continuous expansion of enterprises through its own mature operation experience and advantages. It can absorb more and more high-quality external funds and continuously reduce the capital risks faced by enterprises, so as to realize the stable and sustainable development of enterprises themselves. It can effectively resist the impact of market fluctuations, obtain the share of rental income by relying on its own brand and management advantages, and ensure the rate of return of the enterprise.

2.2.2. Motivation Analysis of RE Asset Lightweight Management

The reasons for the transformation of enterprises to asset light operation are as follows: first, under

the influence of the market environment of the whole industry, in order to improve the competitiveness of the company and avoid the operation risk of the industry. Second, in order to achieve the company's own strategic objectives, improve the return on assets and operation efficiency, avoid the fluctuation of the industry environment and obtain considerable benefits. On the one hand, due to the poor economic situation of the whole RE industry, the development of the industry is limited; On the other hand, it is to improve the enterprise's own operating ability in order to obtain more profits. In recent years, most RE enterprises have begun to implement strategic transformation and adopt asset light operation mode to solve the crisis under the traditional business model. To implement the asset light operation mode, RE enterprises need to control the high profit links in the industrial chain, which requires RE enterprises to accurately locate the advantages of the industrial chain, take key training as the core field in the future, release non key links and outsource to professional enterprises to realize "light as a feather".

2.2.3. Realization of Asset Light Operation Mode of RE Enterprises

The common financing method of general enterprises is through bank loans, while the sale and leaseback is through a third-party leasing company. Compared with after-sales leasing, under the bank loan financing mode, after providing guarantee for the loan, the ownership of fixed assets still belongs to the enterprise and is included in the financial statements [12]. General RE trust investment can be divided into three types: equity type, mortgage type and mixed type. Enterprises choose their own development path according to their own situation and combined with the external economic environment. Some professional investment institutions hold land resources through mergers and acquisitions, but they also have the development ability of RE enterprises. Through cooperation, we can supplement resources, shorten financing time, shorten project development cycle and achieve mutual benefit and win-win results.

2.3. Determination of Weight Index

The calculation formula of weight value W_i^A is shown in equation (1):

$$w_i^A = \frac{\left(\prod_{j=1}^n a_{ij}\right)^{\frac{1}{n}}}{\sum_{j=1}^n \left(\prod_{j=1}^n a_{ij}\right)^{\frac{1}{n}}}$$
(1)

Where a_{ij} represents the elements contained in matrix A, and I and j represent the number of rows and columns where the elements are located respectively. Since this study evaluates the four indicators of RE Internet marketing, n = 4.

Calculate the maximum eigenvalue of the judgment matrix, and the value is as follows (2):

$$\lambda_{\text{max}} = 4.071 \tag{2}$$

The consistency ratio formula (3) is obtained through operation:

$$C.R. = 0.026$$
 (3)

C.R. < 0.1 indicates that it has passed the consistency test, and the evaluation results of the expert group are in line with the consistency test principle.

3. Experience

3.1. Object Extraction

Before determining the appraisal object, the appraisal area should be scientifically divided, that is, the commercial RE with the same or similar characteristic factors should be divided into specific areas. Otherwise, due to the difference of characteristics, it will have a certain impact on the final appraisal value of the commercial RE, and the accuracy of the appraisal cannot be guaranteed. When dividing administrative regions, land and economy are often fully considered. Therefore, in the same administrative region, the location of commercial RE is not very different from the surrounding factors. At this time, the establishment of batch evaluation model should better adapt to the aggregation principle to ensure the accuracy of the model. The higher the concentration of commercial RE, the weaker its

location impact. Once the commercial RE presents the distribution characteristics of blocks and slices in the corresponding areas, its batch evaluation model will also have high accuracy.

3.2. Experimental Analysis

Firstly, based on the particularity of RE customer network behavior and the main line analysis of RE customer mutual viewing network behavior, it is unrealistic to take all the behaviors involved in the RE customer purchase process as the research index of this paper. This is not only because the technical resources and scope involved in some indicators are limited, but also combined with the author's actual research ability. For example, for many social platforms, it is impossible to study every tool such as microblog, wechat, forum and post bar. If you want to collect customers' microblog comments or forwarding times on RE affairs, you also need to collect them through specific microblog operators according to the determined customers' microblog accounts.

4. Discussion

4.1. Background Analysis of Operation Mode Transformation of Real Estate Industry

The characteristics of the RE industry make it have a great demand for funds. Therefore, the RE industry is also divided into capital intensive industries. The reason is that the industry needs to invest a lot of money at the beginning of the period, but the income recovery period is very long. Therefore, it is not enough for RE enterprises to rely on themselves. They cannot guarantee the stability of capital flow and deal with market changes well. Only by actively seeking external funds can RE enterprises provide guarantee for the expansion and normal operation of enterprises and make enterprises develop continuously, as shown in Table 1.

| index | Total fund | Domestic loans | Utilization of | Self raised funds | Other funds |
|-------|------------|----------------|-----------------|-------------------|-------------|
| | sources | | foreign capital | | |
| 2019 | 3784.33 | 3677.83 | 4395.47 | 3453.84 | 7498.47 |
| 2020 | 5784.32 | 4784.37 | 6398.44 | 7395.72 | 8673.47 |
| 2021 | 8932.78 | 8094.45 | 7488.43 | 9634.37 | 10834.44 |

Table 1: Capital sources of real estate enterprises

It can be seen from the above that in 2019, the total sources of RE funds were 378.433 billion yuan, domestic loans 367.783 billion yuan, foreign capital utilization 439.547 billion yuan, self raised funds 345.384 billion yuan and other funds 749.847 billion yuan. The specific results are shown in Figure 1.

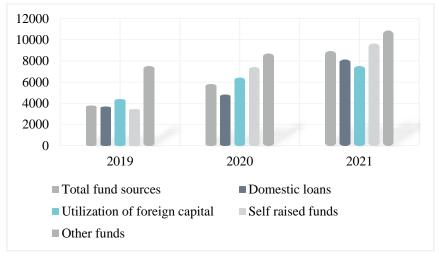


Figure 1: Capital sources of real estate enterprises

As can be seen from Figure 1, the financing of RE enterprises has the characteristics of few channels and single source. Among them, the most dependent financing channel for RE enterprises is bank loans, which will not only produce high interest costs, but also greatly affect the development of RE enterprises. It can be seen from the observation table that the self raised funds of RE enterprises account for less than 40% of the total funds, and the main components of self raised funds are the advance receipts and sales

funds paid by customers, most of which are obtained by customers through bank mortgage loans. It can be seen that debt financing can improve the asset liability ratio of enterprises. With the tightening of monetary policy by banks, it will make the financing of RE enterprises more difficult, and there may be the risk of enterprise capital chain rupture.

4.2. Improving Enterprise Competitiveness

The RE industry prospered rapidly and made great achievements in the improvement of the national economy. Many investors saw its development prospects, so they began to join the RE industry, as shown in Table 2.

| particular year | number | |
|-----------------|--------|--|
| 2018 | 4326 | |
| 2019 | 4738 | |
| 2020 | 6843 | |
| 2021 | 8604 | |

Table 2: Change in the number of real estate development enterprises in China

It can be seen from the above that there were 4326 RE development enterprises in 2018, 4738 RE development enterprises in 2019, 6843 RE development enterprises in 2020 and 8604 RE development enterprises in 2021. The specific presentation results are shown in Figure 2.

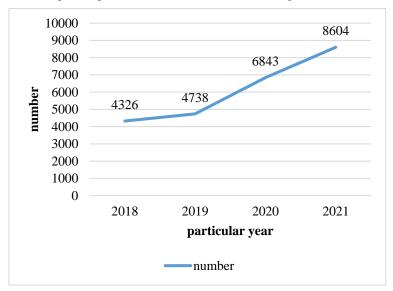


Figure 2: Change in the number of RE development enterprises in China

As shown in Figure 2, the number of RE development enterprises increased from 4326 in 2018 to 8604 in 2021, with a growth rate of 33%. Thus, the competition in the RE industry is becoming more and more fierce. Secondly, in addition to other large domestic RE enterprises taking corresponding measures to promote the development of the industry, Suning Midea and other industry giants also began to use their own strong funds to enter the RE field, use their own brand value to attract a large number of customer resources and occupy a certain market share. In addition, foreign RE enterprises with strong comprehensive strength such as CapitaLand and Sun Hung Kai also began to enter China's RE market, attracting the attention of many customers and seizing a large part of the Chinese market, making the competition in China's RE industry more intense.

5. Conclusion

In the increasingly competitive commercial RE industry, there is a situation of oversupply and high degree of project homogenization in large, medium and small cities in China. When implementing the asset heavy operation mode, many enterprises implement the asset light operation mode in the face of problems such as excessive capital demand, high cost and long project investment return time. Through the research on improving the competitiveness of enterprises, the results show that many foreign RE enterprises also began to enter China's RE market, attracted the attention of many customers, occupied a

large part of China's market, and made the competition in China's RE industry more intense.

Acknowledgments

This work was supported by the "Real Estate Enterprises major Risk Assessment and Management Mechanism in the Process of continuous Innovation Research"- Research Projects of Chuxiong Normal University

References

- [1] Monkkonen P, Deng G, Hu W. Does developers' ownership structure shape their market behavior? Evidence from state owned enterprises in Chengdu, Sichuan, 2004-2011. Cities, 2019, 84(JAN.):151-158.
- [2] Su, Keqiang. On Financing Models of Real Estate Enterprise. 2021(2011-6):56-58.
- [3] Li M, Shen L, Huang G Q. Blockchain-enabled workflow operating system for logistics resources sharing in E-commerce logistics real estate service. Computers & Industrial Engineering, 2019, 135(SEP.):950-969.
- [4] Chen L, Ma D B. Design of Monolithic All-NMOS Three-Level Three-phase Switched-Capacitor Power Converter for Industrial Environmental Sensor Conditioning. IEEE Transactions on Industrial Electronics, 2020, 67(11):9873-9881.
- [5] Chong A, Mohammed A H, Abdullah M N, et al. Maintenance prioritization a review on factors and methods. Journal of Facilities Management, 2019, 17(1):18-39.
- [6] Wang J. The Establishment of the Innovative and Practical Teaching Mode for Architecture Majors with the Help of "Schools-Enterprises-Governments-Research Institutions". Journal of Landscape Research, 2019, 11(02):111-113.
- [7] ZHANG, Chaoxuan. Management Innovation of Tourism Complex Development and Operation Enterprises. Journal of Landscape Research, 2019, v. 11(03):110-112.
- [8] Song W. Operation Mode of General Aviation Companies and Related Enterprises in China. Strategic Study of Chinese Academy of Engineering, 2019, 21(3):127-132.
- [9] Ametefe F K, Devaney S, Stevenson S A. Optimal composition of hybrid/blended real estate portfolios. *Journal of Property Investment & Finance*, 2019, 37(1):20-41.
- [10] Caulfield J. TECHNOGY SHOWCASE. Building design & construction, 2019, 60(6):30-31.
- [11] Y Zhai, Chen K, Zhou J X, et al. An Internet of Things-enabled BIM platform for modular integrated construction: A case study in Hong Kong. Advanced engineering informatics, 2019, 42(Oct.):100997.1-100997.15.
- [12] Yang G L, Fukuyama H, Chen K. Investigating the regional sustainable performance of the Chinese real estate industry: A slack-based DEA approach. Omega, 2019, 84(APR.):141-159.