

# Problems and Suggestions of Employee Stock Ownership Plan of Jiai Technology

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**Abstract:** This article elaborates on the implementation of Jiai Technology's employee stock ownership plan from the aspects of the issuance object, the source of funds and stocks, the price of the underlying stock, and the management model. Evaluate the implementation effect of the employee stock ownership plan through three aspects: solvency, market valuation and R&D capabilities, and then found that the employee stock ownership plan has narrow incentive targets, too low employee shareholding ratio, lack of performance appraisal conditions and other problems, and put forward targeted suggestions.

**Keywords:** Employee stock ownership plan, Incentive effect, Suggestions, Jiai Technology

## 1. Introduction

Employees are the practitioners of corporate innovation, and stimulating their innovative vitality is the key to enhancing corporate innovation capabilities [1]. In June 2014, the "Guiding Opinions on the Pilot Implementation of Employee Stock Ownership Plans by Listed Companies" was released, and companies set off an upsurge in the implementation of employee stock ownership plans. The "benefit binding" function of the employee stock ownership plan can not only effectively improve the work efficiency of employees, but also play a good incentive role [2]. Moreover, it can enhance teamwork and corporate cohesion [3], which is conducive to the upgrading of the property right structure of the enterprise and the enhancement of core competitiveness [4]. In the ever-increasing market competition, the implementation of employee stock ownership plans is the trend of future development. Therefore, research on employee stock ownership plans has become an increasingly important topic [5].

## 2. Jiai Technology Employee Stock Ownership Plan Process

### 2.1. Company Background

Jiai Technology Co., Ltd. (referred to as Jiai Technology) was established in May 2006 and was listed on the Shenzhen Stock Exchange's Growth Enterprise Market in 2012, The stock code is 300309. Its main business is petroleum refining, petroleum equipment research and development, and manufacturing. The operating income of Jiai Technology declined slightly in 2016. The launch of AMC business in 2017 led to a rapid increase in operating income, with an increase rate of 212.91%. In 2018, operating income exceeded 800 million yuan, a year-on-year increase of 15.56%. As of June 25, 2019, the company's total share capital was 886 million shares. The number of employees has been gradually lost since 2016, and the loss has been relatively large. In order to attract and retain talents, the employee stock ownership plan has become an inevitable choice for the company.

### 2.2. The Content of Jiai Technology's Employee Stock Ownership Plan

In June 2015, the company's board of directors reviewed and approved the first phase of the employee stock ownership plan (draft). The second phase was implemented in September 2017, and the third phase was implemented in December 2017. The employee shareholding plan of Jiai Technology includes the key content of the following five aspects:

#### 2.2.1. Participants

In terms of the number of participants, the number of participants in the first phase was 153 (approximately 23.76% of the total number of employees in the year of implementation), and the number of people in the second and third phases were 7 (approximately 2.4% of the total number of

employees in the year of implementation) and 45 (Approximately 17.79% of the total number of employees in the year of implementation). After 2014, Jiai Technology accelerated its expansion speed. As the company expanded, the number of employees also increased, but the proportion of incentives was still relatively low.

In terms of the types of participants, the number of other managers and employees in the first phase of the plan is 147, accounting for 96% of the total number, and the remaining 6 are company supervisors and senior management personnel; the second phase of the employee stock ownership plan is still based on other management personnel and employees. Employees are the main incentive object, the number is 6 people, accounting for 86% of the total number of issuance, the company's directors, supervisors, and senior managers are 1; the third phase of the employee stock ownership plan has no company directors, supervisors, and senior managers, all of which are other Managers and employees.

### 2.2.2. Sources of Funds and Stocks

Table 1: Shares of Jiai Technology's employee shareholding and capital contributions Unit: ten thousand yuan

	Phase 1	Phase 2	Phase 3
Company directors, supervisors and senior executives	3000	3000	0
Other managers and employees	7000	2000	5000
total	10000	5000	5000

In terms of funding sources, Jiai Technology's third-phase employee shareholding funds all come from employees' legal remuneration and self-raised funds. The company's third-phase employee shareholding initial planned investment share (1 yuan per share) is shown in Table 1. The final number of shares held by each holder is determined after the employee's final actual capital contribution.

In terms of stock sources, the first phase of the employee stock ownership plan stock source, the company commissioned Xingzheng Asset Management to form the Ji Ai Technology No. 1 directional asset management plan to manage all the assets held by its employees.

### 2.2.3. Underlying Stock Price

The issue price of Jiai Technology's first phase of stock is 10.62 yuan/share, the average transaction price of the second phase of employee stock ownership plans is RMB 23.05/share, and the average transaction price of the third phase of employee stock ownership plans is RMB 21.48/share.

### 2.2.4. Lock-up Period and Duration

The lock-up period of the first phase of the employee stock ownership plan is 36 months and the duration is 48 months, and the lock-up period of the second and third phases of the employee stock ownership plan is 12 months, and the duration is 24 months.

### 2.2.5. Management Method

Due to the lack of familiarity with the implementation process, stock fund management and other processes, in order to protect the interests of the company and the holders, when implementing the employee stock ownership plan, Jiai Technology directly chooses to entrust a professional third-party asset management agency for agency management. In the second and third phases, Industrial International Trust Co., Ltd. was entrusted to manage the assets.

## 3. The Effect of The Implementation of The Employee Stock Ownership Plan

### 3.1. Solvency

The debt-to-asset ratio is a measure of the company's long-term debt solvency. Too high a debt-to-asset ratio means that the company has high debt and needs to bear greater financial risks, which is not good for the company's development. Its reasonable value should be between 40%-60% [6]. Jiai Technology's asset-liability ratio changed from 6.24% to 46% from 2014 to 2015. After the implementation of the first phase of the employee stock ownership plan, the company's asset-liability structure has been optimized, but the main reason for the change in the asset-liability ratio is the substantial increase in total liabilities. , The role of employee stock ownership plans is not obvious. Since 2017, the debt-to-asset ratio has been increasing and is greater than a reasonable range, the company's debt is on the high side, and the financial risk it bears is on the high side. After the implementation of the second and third employee stock ownership plans, the asset-liability ratio

continued to increase. It can be seen that the third-phase employee stock ownership plan of Jiai Technology has not improved its debt solvency.

### 3.2. Market Valuation

The price-to-book ratio refers to the ratio of stock price per share to net assets per share. The lower the ratio, the lower the risk. The market-sales ratio refers to the ratio of the total market value to the sales per share. The lower the ratio, the greater the investment value of the company's stock. Before and after the implementation of the first phase of the Employee Stock Ownership Plan, Jiai Technology's P/B ratio increased from 3.08 to 7.11, and its P/S ratio increased from 16.17 to 33.12, both of which nearly tripled. The turbulence in the crude oil market affected the company's operating conditions. As a result, the P/S ratio and P/B ratio have increased, and the employee stock ownership plan has little impact on it and has no ability to reverse it. After the implementation of the second and third employee stock ownership plans, the value of the market-sales ratio and the price-to-book ratio declined, but the decline was small, indicating that the market did not react strongly to the event of the implementation of the employee stock ownership plan.

### 3.3. R & D Capabilities

Table 2: Changes in the proportion of R&D personnel in Jiai Technology from 2014 to 2018

years	2014	2015	2016	2017	2018
Proportion of R&D personnel	47.56%	29.97%	26.20%	26.13%	5.53%

Research and development capabilities are the foundation and guarantee for the company's development and survival. The proportion of R&D personnel can also reflect R&D capabilities to a certain extent. The changes in the proportion of R&D personnel of Jiai Technology from 2014 to 2018 are shown in Table 2: The proportion of JAI Technology's R&D personnel has been declining since 2014, and has dropped to 5.53% in 2018. During this period, the total number of JAI Technology's employees has not increased significantly. It can be seen that Jiai Technology's implementation of the employee stock ownership plan has not strengthened employees' confidence in the company's future, nor has it attracted new R&D personnel, thereby reducing the company's R&D personnel. In short, the implementation of the company's employee stock ownership plan did not promote the enhancement of the company's R&D capabilities.

## 4. Insufficiency of Jiai Technology's Employee Stock Ownership Plan

Judging from the implementation effect of Jiai Technology's employee stock ownership plan, the solvency, market valuation and R&D capabilities are not effective, indicating that the employee stock ownership plan has not fully exerted its effects, and the main deficiencies are as follows:

### 4.1. Narrow Range of Incentives

First of all, the proportion of participants in the first phase of Jiai Technology's employee stock ownership plan is 23.76%, and the second and third phases are 2.4% and 17.79% respectively. The proportion of the number of incentives to the total number of employees is obviously low, employees are given dual identities through shareholding plans to participate in the company's daily operation and management activities [7], a too low number of participants cannot stimulate employees' enthusiasm and work enthusiasm, and cannot achieve effective motivational effects, it is also difficult for employees to have a significant impact on the company's overall operating performance. Second, the lack of incentives for directors, supervisors and senior management. Directors play a decisive role in the choice of the company's strategic development direction, senior management is the backbone of the specific implementation of the strategy. Too low incentives are difficult to improve the company's operating performance, it is not conducive to the sustainable development of enterprises.

### 4.2. Employee Shareholding Ratio Is Too Low

In the first phase of the employee stock ownership plan, the number of employees of Jiai Technology accounted for 1.7% of the company's total share capital, the second phase was 1.3%, and the third phase was 1.4%. Although the employee shareholding ratio complies with the "Guiding

Opinions" that the number of shares held by employees of listed companies shall not exceed 10% of the company's total share capital, in general, the employee shareholding ratio is too low. On the one hand, too low shareholding will reduce employees' sense of "ownership", resulting in employees lacking motivation, and it is difficult to combine company interests with their own interests; On the other hand, too low shareholdings make employees have limited voice, unable to truly participate in the company's daily operations, and have little influence on the company's decision-making. It is difficult for the company's operating performance to be improved through employee shareholding plans.

#### ***4.3. The Holding Period Is Too Short and Lack of Performance Appraisal Conditions***

The short shareholding period of Jiai Technology means that the company's long-term development is not closely related to personal efforts, which will cause employees to pay more attention to the company's short-term business performance and self-interest, and ignore the company's long-term development. Therefore, it is difficult to achieve the purpose of providing permanent incentives to employees. Ji Ai Technology did not set up a corresponding performance evaluation mechanism in the three phases of employee stock ownership plans. Lack of performance appraisal conditions, there is no performance pressure for employees in the process of holding stocks. This situation will form employees' lazy psychology and weaken the incentive effect of employee stock ownership plans.

#### ***4.4. Single Funding Method***

Our country does not have financial policy support for employee shareholding, instead, there are many restrictions, for example, companies are not allowed to invest in advances or loans for employees, and employees' loans from financial institutions must not be used for employee shareholding [8]. Based on this, the employee stock ownership plan of Jiai Technology adopts the method of employee self-raising, and the method of capital contribution is single. On the whole, Jiai Technology's employee stock ownership plan did not follow the principle of combining risks and benefits when setting up capital and stock sources, resulting in few sources of funds and high capital pressure on employees.

### **5. Suggestions for Improvement of Jiai Technology's Employee Stock Ownership Plan**

#### ***5.1. Expand the Scope of Participation***

When setting the number and types of participants, Jiai Technology should focus on motivating outstanding business backbones and new employees, and formulate more detailed personnel participation standards. When determining the standards for the backbone of the business, it should not be limited to the job level and academic qualifications, but also a comprehensive evaluation based on the individual employees' contributions to the company.

#### ***5.2. Increase Employee Shareholding Ratio***

Ji Ai Technology should combine the shareholding amount with the employee's contribution to the company, formulate a reasonable number of stock grants based on the Hai's post value evaluation method, realize the differentiation of the number of shares, and appropriately increase the proportion of employees' shareholding. The amount of shares held by employees in each position can be calculated based on the total scores of the positions in the incentive target range, the operation steps are as follows:(1) Use the weighted average method to calculate the weighted average score of each post. (2) Determine the share subscription coefficient for each position. The basic-level position score is used as the benchmark position coefficient, and the difference between the average score of each position and the basic-level position score is used as the relative position coefficient of various positions, this coefficient is the share subscription amount of the position. (3) Determine the sum of employee subscription coefficients and determine the amount of individual share subscriptions, the formula is as follows:

$$\text{Sum of employee subscription coefficient} = \sum (\text{subscription coefficient of this position} \times \text{total number of employees of this position}).$$

$$\text{Amount of individual share subscription} = \frac{\text{the employee's subscription coefficient}}{\text{sum of subscription coefficient}} \times \text{total number of issued shares}.$$

At the same time, in order to enable shareholders to participate in the company's daily business

activities, Jiai Technology should reasonably set the lower limit of the number of employees' shares in the company's total share capital.

### **5.3. Extend the Unlock Period and Improve the Assessment Conditions**

Jiai Technology should change the duration of the employee stock ownership plan to 3-5 years, if the duration is too short, it will weaken the long-term impact of the employee stock ownership plan on the company. Only when employees hold company stocks for a long time will they pay more attention to the company's long-term development rather than immediate interests. However, the long duration will make employees think that the sinking cost is too high to participate in the employee stock ownership plan enthusiastically. With reference to other listed companies that have successfully implemented the employee stock ownership plan, the duration of the employee stock ownership plan of Jiai Technology is 3 -5 years are most suitable.

Jiai Technology should formulate evaluation conditions when designing the employee stock ownership plan, and rewards can be obtained after these evaluation conditions are fulfilled. Employees can receive cash dividends after reaching the company's financial performance, which can only be realized when the employees unlock the stock. Employees' participation in the employee stock ownership plan is undoubtedly the realization of their own interests to the greatest extent, if more benefits can be achieved by achieving the mid-term goals of the employee stock ownership plan, employees will more actively participate in the company's daily business activities.

### **5.4. Diversified Funding Sources**

The source of funds for Jiai Technology's employee stock ownership plan can be self-raised plus a special reward fund. This method takes into account the interests of both the company and employees, and uses the company's profits as the premise to raise funds for employees to reduce the burden, it not only encourages employees to actively work for the company, but also reduces the financial burden for employees who expect to participate in the company's operations and advance and retreat with the company.

Ji Ai Technology can refer to the Longjing Environmental Protection Company's employee stock ownership plan, The plan has been divided into 10 phases at the beginning, and it will be divided into one phase each year. Starting from the second year, the source of funds for the shareholding plan for the next year will be one-tenth of the net profit obtained at the end of the previous year. In this way, you can continuously improve company performance and encourage employees during the current year, and at the same time increase the morale of those employees who have not participated in the current employee stock ownership plan to participate in the work, so as to meet the participation standards and participate in the next year's employee stock ownership plan, and they face relatively little financial pressure. The company can also lend to employees at a lower interest rate, The employees of Jiai Technology obtain funds through credit, and finally use stock income to repay the principal and interest of the purchase of stocks. Employees don't have to contribute capital throughout the process, and they still pay for labor, but they can also benefit from employee stock ownership plans.

## **References**

- [1] Zhou Donghua, Huang Jia, Zhao Yujie. *Employee Stock Ownership Plan and Enterprise Innovation [J]. Accounting Research*, 2019, (03):63-70.
- [2] Hao Yongliang, Jin Xin, Zhang Yongji. *Employee Stock Ownership Plan under the "Fog of Reduction in Holding"-A Comparative Analysis Based on Equity Incentives [J]. Management Review*, 2019, 31(10): 164-177.
- [3] Han Guangqiang, Xu Yuan, Shi Dongliang. *The Impact of Employee Stock Ownership Plans on Corporate Performance-Based on Listed Companies on the Growth Enterprise Market [J]. Business Economics Research*, 2019, (12): 168-170.
- [4] Meng Qingbin, Li Xinyu, Zhang Peng. *Can Employee Stock Ownership Plans Promote Corporate Innovation?-Based on Empirical Evidence from the Perspective of Enterprise Employees [J]. Management World*, 2019, 35(11): 209-228.
- [5] Chen Yunjia, Lu Changjiang, Huang Haijie, etc. *Why do Listed Companies Choose Employee Stock Ownership Plans?-Evidence Based on Market Value Management [J]. Accounting Research*, 2020, (05): 91-103.

[6] Chen Dapeng, Shi Xinzheng, Lu Yao, Li Zhuo. *Employee Stock Ownership Plan and Financial Information Quality* [J]. *Nankai Management Review*, 2019, 22(01): 166-180.

[7] Miao Ling, Lei Lanxin, Wu Jiali. *Exploratory Research on Employee Stock Ownership Plan to Improve Company Performance* [J]. *Market Weekly*, 2020(03): 21-22.

[8] Xia Xin, Gui Lin, Fang Chaoyan. *Effect analysis and improvement countermeasures of SG group company's employee stock ownership plan* [J]. *Finance and Accounting*, 2018, (11): 37-39.