

Research On Fundraising Management of University Education Foundation based on Alumni Donation

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Abstract: In order to solve the problem of poor maturity of traditional education fund raising management method, this paper studies the university education fund raising management method based on alumni donation. To establish a theoretical model of alumni's identification with colleges and universities, and calculate the correlation parameters between alumni's identification with Alma mater, donation behavior and fundraising management. The implementation process of fundraising management was designed, and the fundraising management was evaluated according to the analytic hierarchy process, so as to facilitate timely adjustment of the management method and complete the research on the fundraising management method based on alumni donation behavior. By comparing with the traditional management method, it is proved that the management method based on alumni donation is more mature and scientific, which can promote the good development of university education foundation.

Keywords: Alumni donation behavior; Higher education foundation; Financing management; Analytic hierarchy

1. Introduction

University education foundation is a foundation initiated by universities and aimed at serving universities. University education foundation for folk independent non-profit community groups, the agency to raise money by donations from all sectors of society, through the legal operation, promote the value of capital, to attract donations follow-up, to support the development of the school education career and academic research, teaching, research, reward excellent teachers, reward excellent students, help poor students, improvement the action such as teaching facilities. According to the source of funds, it is divided into social donation, corporate donation and alumni donation. According to whether the donor limits the use of the donation, it can be divided into non-restrictive funds (not specifying the use scope of the fund) and restrictive funds (specifying the use scope of the fund, such as campus infrastructure construction, discipline construction, international exchange between teachers and students, etc.) [1].

After years of development, our country's university education foundation has made a great achievement, but compared with foreign first-class university education foundation, in such aspects as donated funds, fund management level also there is a big gap, especially in such aspects as financing strategies, methods, lack of strategic planning, lack of fund-raising initiative, in the face of potential donors, raise the attraction of the project, less

competitive, financing channel is narrow, financing range [2] there's still a lot of limitations. In the social relations of colleges and universities, alumni are one of the most important groups. For a long time, alumni donation, as the main source of donations for colleges and universities, has been highly valued by foreign colleges and universities and become an important force in the development of higher education abroad [3]. At present, with the continuous development of higher education in China, alumni have become an important force for the development of universities, and alumni donation has become an important source of funds for the development of universities. Due to the different factors of alumni donation, there are some limitations in using traditional management methods to manage fundraising. Therefore, based on the above analysis, this paper will study the fundraising management method of university education foundation based on alumni donation.

2. Fundraising Management of University Education Foundation based on Alumni Donation

2.1. Clarify the relationship between alumni donation and fund raising

The university education foundation depends on the university. As a non-profit organization, its funds must be used within the scope consistent with its purpose. After being applied to project and organizational development,

if there is any surplus money, it cannot be distributed as profits, but must be retained for the next project or organizational development. Alumni donation is based on the emotional connection between alumni and universities. Therefore, based on the social identity theory and relevant studies on organizational identity, this paper divides the Alma mater's identity into two dimensions, namely emotion and behavior, and investigates the factors influencing alumni's identity from the perspective of school and alumni [4]. Among them, the school level includes

three factors: school prestige, inter-organizational competition and educational service quality. At the alumni level, there are three factors: school work, school experience and work achievements. At the same time, the influence of these six aspects on the two dimensions of alumni identity was tested, namely, the influence on the emotional identity and behavioral identity of the Alma mater. On this basis, the original theoretical model of alumni and Alma mater identity as shown in the figure below was constructed.

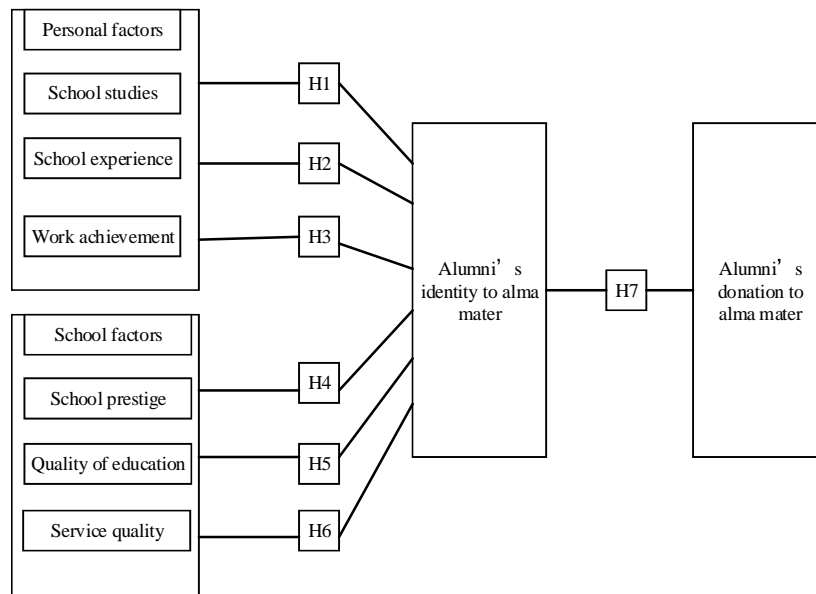


Figure 1. Theoretical model approved by alumni and alma mater

According to the relationship shown in the model in the figure above and combined with the actual survey results, the higher the alumni's identification with their Alma mater, the lower the difficulty of fundraising management and the better the management effect. In order to clarify the focus of fund raising management and the mathematical abstract relationship between the factors in the above theoretical model, the related indexes of fund raising management should be calculated.

2.2. Calculate the parameters associated with alumni donations and foundation fundraising

Multiple variables are included in figure 1 above, first quantified by the degree to which reliability affects the above indicators. The formula for calculating reliability is shown below.

$$\alpha = \frac{[k(k-1) * (1 - \sum S_i^2)]}{S_i^2} \tag{1}$$

In formula (1), α is the reliability coefficient, k is the total number of quantitative indicators, S_i is the quan-

tized variance of the i th alumni donation index, and S_i is the quantized variance of all alumni donation indicators. The higher the value of α , the more reliable the indicator is, that is, the greater the influence of this identity factor on alumni donation [5]. The influence indexes of alumni donation behavior are divided into positive indexes and reverse indexes. The efficiency coefficient conversion formula shown below is adopted to obtain the appropriate index value.

$$\begin{cases} X_z = \frac{X - X_{min}}{X_{max} - X_{min}} \\ X_f = \frac{X_{max} - X}{X_{max} - X_{min}} \end{cases} \tag{2}$$

In formula (2), X_z is the efficiency conversion coefficient of the forward indicator, X is the actual value of each indicator, X_{min} is the minimum value of each indicator, X_{max} is the maximum value of each indicator, and X_f is the efficiency conversion coefficient of the reverse

indicator [6]. According to the following formula, the moderate value of quasi - commutative index is selected.

$$X_i = \begin{cases} 1 & , X = t \\ \frac{|X - t|}{\max \{X_{\max} - t, t - X_{\max}\}} & , X \neq t \end{cases} \quad (3)$$

In formula (3), t is the moderate value of each index. In the actual financing management, select the moderate index value, and plan the execution steps of financing management according to the index value [7]. According to the calculated parameters, assist the implementation of university education fund raising management.

2.3. The management and execution of university education fund raising

According to the preliminary questionnaire survey and the theoretical model agreed by the alumni and Alma mater established above as well as the calculated correlation parameters, the implementation process of specific projects of the university education fund management is the same although the purpose, amount and donation direction of the alumni to the university are different. In combination with the actual situation of running the university and the education fund, this paper determines the flow chart of fund raising project management of alumni donation as shown in the figure below.

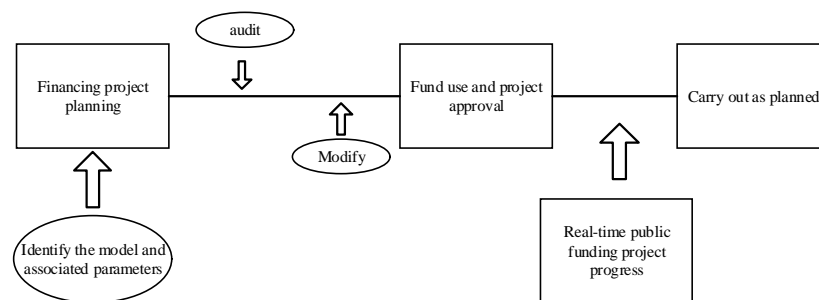


Figure 2. Flow chart of fund raising project management and implementation of alumni donation

In the project planning of university financing, the key points of each implementation link and the implementation plan should be combined with the alumni donation identification model and related parameters calculated in the early stage. In the actual development, colleges and universities may, according to the actual needs of their own development, set up various fundraising projects according to the categories of supporting the construction of campus infrastructure, supporting the construction of disciplines and donation for non-restricted purposes. The beneficiary units shall set up the project management committee, formulate the project implementation plan and submit it to the foundation for examination and verification. The specific scope and timing of the intended funds should be detailed in the financing project plan [8]. If there is any adjustment in the plan during the use of funds, the plan for the use of funds shall not be revised until the donor is consulted in time. In order to expand the scale of the fundraising fund and the influence of the foundation, the university education foundation should list the rights of the donor in the fundraising plan as far as possible. For example, the university foundation may record the list of donors and the amount of donations in the appendix to the university to permanently commemorate the donation to the university; Units and individuals with large donations may be elected as directors of the foundation and enjoy the power of directors as stipulated in the constitution of the foundation; When the donation

amount reaches a certain amount, the donor's name or a fund named according to his/her wish can be established, or inscriptions such as those on the buildings, gardens and sites of the school can be commemorated; In the related legal system to allow, within the scope of the donor shall be preferred to enjoy high-quality resources, such as school teaching, scientific research is favorable for colleges and universities provide all kinds of talents, intelligence support and professional services, enjoy priority in all kinds of cooperation and education scientific research resources training center, technology center, practice, scientific research, production base and so on.

After the examination and approval, the use of funds. The beneficiary shall submit the prepared project implementation plan to the foundation, and after the foundation's preliminary examination and approval, the board of directors of the foundation may organize and invite experts to review the feasibility of the project. If the project is approved by the expert review, the foundation shall set up the project [9]. After the establishment of the project, by hiring professional personnel under the supervision of the relevant supervision group to implement the capital project. In the process of project implementation, real-time public financing project progress is made through portal website, school newspaper, project progress report and other forms. The management of funds raised by the foundation donated by alumni will be performed in accordance with the process shown in the figure above, so

that the project implementation process can be evaluated in order to improve the deficiencies when carrying out similar projects later.

2.4. Financing project management implementation evaluation

After the end of the project, the analytic hierarchy process (ahp) was used to evaluate the project execution

process. The total score of the target layer was set as 100 points, and then given a certain weight according to the importance of each indicator of the evaluation indicator layer and the indicator factor layer. Finally, each factor of the indicator factor layer of each university education foundation project was scored, as shown in the following table [10].

Table 1. Evaluation of financing project management implementation

Evaluation index	Indicator description	Index score weight
Project positioning 0.24	Evaluate whether the goal is specific or not	0.1
	Has the project been adequately demonstrated without major defects	0.1
	Whether the project is targeted	0.04
Project plan 0.21	Is there a detailed implementation plan for the project	0.08
	Whether the project is scientific, reasonable and easy to operate	0.05
	Whether the budget arrangement of the project is reasonable	0.08
Project management 0.3	The responsibility of project managers and participants is clear	0.06
	Have effective financial management methods	0.06
	Whether to use the performance information of the project to strengthen the project	0.09
	Whether real-time information is disclosed during implementation	0.09
Project results 0.25	Whether to achieve the objectives in the plan	0.12
	Alumni and beneficiaries of the donated project satisfaction	0.13

The average criteria in the table above shall be used for evaluation after each execution of the management of foundation fundraising projects donated by alumni. Based on the evaluation results, the foundation will make timely adjustments in later similar projects to promote the sound development of fund raising management based on alumni donations. So far, the research on fundraising management method of university education foundation based on alumni donation has been completed.

3. Feasibility Verification of Management Methods

This paper studies the fundraising management method of university education foundation based on alumni do-

nation. In order to verify the feasibility of this method, relevant experimental steps are designed to reach the verification conclusion.

3.1. Validation

Two universities with similar scale, direction, nature and administrative institutions, including A and B, were selected as the experimental environment for this management method verification experiment. The experimental subjects were A and B universities and the university education foundation of China. The experimental environment and experimental object parameters are shown in the following table.

Table 2. Experimental environment and experimental object parameters

Project	University A	University B
School scale	4 campuses, 13 subject categories	3 campuses, 12 subject categories
School orientation	Comprehensive university	Comprehensive university
Administrative level	Directly under the ministry of education	Directly under the ministry of education
Dominant subject category	Science, law	Engineering, agriculture
The number of students	16047 undergraduate students	17342 undergraduate students
Professional manager of the foundation	32	29
Foundations are liquid funds	About 3000000 yuan	About 3420000 yuan

The two universities have different Numbers of alumni to donate to the university foundation, and the two universities use different methods of fundraising management to manage the fundraising of alumni donation. According to the verification process below, relevant experimental data are obtained. By analyzing the experimental data, the experimental conclusion is drawn.

3.2. Validation process

According to the statistics of educational fund application of A and B, the traditional fund raising management method and the fund raising management method designed in this paper are respectively used to manage the existing university education fund raising of the two universities. The experiment is a comparative experiment. The fundraising management method of university education foundation based on alumni donation proposed in this paper is the experimental group, while the traditional

fundraising management method of university education foundation is the comparison group. University A applied the management method of the experimental group, while university B applied the traditional management method of the comparison group.

The alumni endowment funds of the education foundation of the two universities were treated in accordance with the management methods of the experimental group and the comparison group, and a questionnaire survey was conducted to the beneficiaries and donors, and the effective utilization rate of alumni donation financing under the two different management methods and the ratio of the remaining amount of fundraising to the total amount of alumni donation were calculated. By analyzing the feedback content of the questionnaire filled by the respondents, the satisfaction degree of the respondents to

the two different financing management methods was obtained.

Comparing the advantages and disadvantages of the two management methods, the ratio of beneficiary and donor satisfaction, effective utilization rate of fundraising and the proportion of fundraising surplus to the total alumni donation was 60%, 25% and 15% respectively as the maturity index. Analyze the experimental index and draw the experimental conclusion.

3.3. Verification results

The test results of the management methods of the experimental group and the comparison group are shown in the following figure. The information in the figure is analyzed to complete the verification.

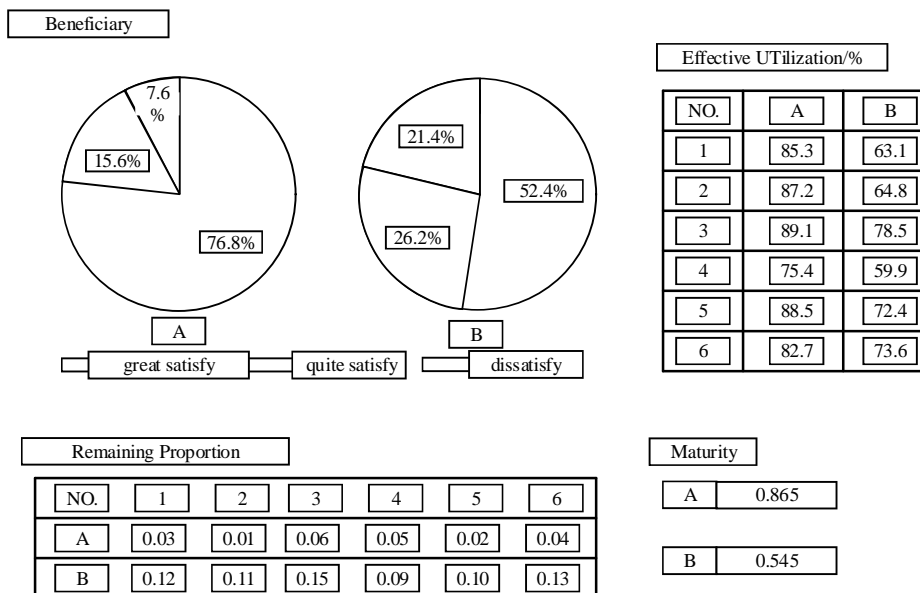


Figure 3. Experimental results

According to the analysis of the above figure, donors and beneficiaries are highly satisfied with the management method of the experimental group, among which 76.8% are very satisfied with the management method of the experimental group, and 15.6 are quite satisfied with the management method of the experimental group, both high due to the satisfaction of the management method of the comparison group. In addition, 7.6% of the respondents were dissatisfied with the management methods in the experimental group, far lower than 21.4% in the control group. This indicates that both donors and beneficiaries are more satisfied with the management method of the experimental group. From the perspective of effective utilization rate of fundraising, the effective utilization rate of fundraising of university education fund A using the management method of the experimental group is

much higher than that of university education fund B using the management method of the comparison group. The higher the effective utilization of financing, the more scientific the management method. From the perspective of the proportion of financing residual, the proportion of the experimental group management method is significantly lower than the control group management method. According to the comprehensive calculation of the maturity of the two management methods, the maturity of the management method of the experimental group is 0.865, while the maturity of the management method of the comparison group is 0.545, indicating that the management method of the experimental group is superior. To sum up, the fundraising management method of university education foundation proposed in this paper based on alumni donation has a higher maturity, and the use of

this management method can promote the sound development of fundraising management of university education foundation.

4. Conclusion

Alumni resources are the precious wealth of universities and one of the important sources of education funds. With the continuous and rapid development of China's economy, alumni donation has gradually become an important source of financing for higher education foundations in China. This paper studies the fundraising management method of university education foundation based on alumni donation, and through the experiment with the traditional fundraising management method of foundation, proves that it has better applicability and better management effect.

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