Using AI to Enhance Recruitment Effect

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Abstract. In today's rapid economic development, the competitiveness of enterprises is more and more reflected in the talent competition, and the important means to obtain talents is recruitment. With the development of economy, recruitment channels are becoming more and more diversified. Enterprises will choose recruitment channels according to various reasons to recruit suitable candidates for the vacant positions of the enterprise. However, after finding the suitable people, how to keep them or hire them. After the recruitment of employees, whether the performance of employees is related to the recruitment channels has an important reference role for the selection of human resources. We use AI technology to measure the performance of employees through the three dimensions of subjective initiative, job satisfaction and job self dedication. Therefore, it has theoretical and practical value for improving the recruitment effect and contribution.

1. Introduction

Nowadays, in the era of big data, the demand of society and enterprises for talents is becoming more and more obvious, and the talent competition among enterprises is also very fierce, and the recruitment of human resources, the intermediary connecting enterprises and talents, is becoming more and more important. How to introduce high-quality talents and reduce costs has always been the core pursuit of enterprises. In fact, enterprise human resources are recruiting high-quality talents. It costs a lot of manpower, financial resources and material resources on the road of employment, and sometimes it can't achieve the desired effect even with high cost.

Therefore, we decide to explore how to recruit excellent talents with low cost, whether the performance of employees is related to the channels they enter the company, whether different people choose recruitment channels is related to their occupations, and what kind of recruitment channels are most effective for people of different occupations.

Around different recruitment channels, we investigate college students, interns and office workers (including human resource workers) respectively, and inquire about work performance of those who have worked or are working. Otherwise, we explore which channel employees perform best from the case of workers, and make a comparison with the ideas of college students and interns. In addition, we compare the cognition of college students, interns and HR workers who have recruitment experience, and expect to give different suggestions.
2. Literature Review

Fei Huang & Qun Gao (2011) believed that the goal of channel selection was to carry out the “6R” (i.e. appropriate time, source, cost, candidate, scope and information) principle on the basis of comprehensive analysis of the characteristics of multiple channels and individual enterprise’s own talent demand [3]. Quan Nan (2013) thought that recruitment channels should be based on improving the effectiveness of enterprise recruitment [6]. There were many kinds of recruitment channels, each of which has its advantages and disadvantages. Enterprises should choose recruitment channels according to the characteristics of vacant positions, and use all kinds of channels comprehensively, so as to solve the problem of low recruitment efficiency. Bo-Xun Yang (2016) considered that WeChat and other channels could be combined in the recruitment process to form a competitive advantage in the company after analyzing the current recruitment situation of knowledge workers “campus recruitment” and “internal staff circle of friends” channels, in order to improve efficiency and expand the effective scope of recruitment [2].

Otherwise, Moser (2005) believed that the effect of recruitment channels could be reflected by various performance variables after employees were employed, such as short-term job satisfaction and long-term employee turnover rate [5]. Gannon (1971) concluded that the most effective recruitment channel was employee recommendation by studying employee's working years and employee turnover rate [4]. Borman & Motowidlo (1993) proposed that employee performance was defined as the combination of all behaviors related to the achievement of organizational goals or specific work in the process of performing tasks, and these behavior combinations could be measured according to the degree of achievement of organizational goals [1].

In view of this, the selection of recruitment channels is closely related to the effectiveness of recruitment and the final results. If we do not choose carefully, we will not pay attention to the final results. It is not only irresponsible for human resources, but also dereliction of duty.

3. Research Method

We adopts the way of questionnaire survey, using the combination of online and offline methods for data collection, online using the questionnaire. Questionnaire survey software spread and fill in on the network, paper offline questionnaire is to send out to the subway entrance with more people. A total of 524 questionnaires are collected, and the effective recovery rate is 78%.

In this paper, students, interns and office workers are randomly selected to investigate their channels of entering the company and their performance after being employed. Among them, students or office workers who have recruitment experience are also investigated. According to the actual situation, they think that the employees who enter a certain channel have the best performance, so as to further test and analyze. In this viewpoint, we compare whether the selection of recruitment channels are really related to employee performance.

4. Research Results

According to the analysis in Table 1, if the performance of employees is measured by the three dimensions of the survey, the employees who enter the company through headhunting have the best performance, followed by internal recruitment, media recruitment, online recruitment and campus recruitment, and the acquaintance recommendation channel has the worst performance.

In today’s network is so developed, all kinds of information are shared and transmitted conveniently through the network. For young people, it is the most commonly used way to find a job through the network. As it can be seen from Table 1, the most commonly used network channels have the highest frequency of job seekers, while the quality of job seekers on the network is uneven, so the performance of employees is in the medium level.

Otherwise, it can be seen from Table 2 that the coefficient of independent variable a is 11.176, and the constant B is 31.065. Therefore, the functional expression of employee entry channel and employee performance, that is, the regression equation is $y = 11.176x + 31.065$, and the significance
of the relationship between them is less than 0.05. Therefore, the selectivity of independent variable recruitment channel has a significant impact on the performance of dependent variable employees.

Therefore, HR’s cognitive bias about which recruitment channel is the best or which channel has the best performance is less affected by its own channel of entering the enterprise. We speculate that it is more caused by other factors, but the premise of this paper is to abandon other factors and only analyze from channel and employee performance. Research this topic, in order to recruit or candidates need, the first step can be the fastest time to consider the best channel.

| Access Channel              | Number of people | Total employee performance score | Average score of employee performance |
|-----------------------------|------------------|----------------------------------|---------------------------------------|
| Online Recruitment          | 94               | 5,969                            | 63.5                                  |
| Campus Recruitment          | 86               | 5,397                            | 62.76                                 |
| Internal recruitment        | 8                | 559                              | 69.88                                 |
| Recommended by Acquaintances| 39               | 2,340                            | 60                                    |
| Media Recruitment           | 7                | 469                              | 67                                    |
| Headhunter Recruitment      | 5                | 358                              | 71.6                                  |

Table 2. Regression analysis of recruitment channels and employee performance.

| Model                          | Nonstandardized Coefficient | Standardization coefficient | T-Value | Significance |
|--------------------------------|-----------------------------|-----------------------------|---------|--------------|
| (constant)                     | B                           | Standard Error              | T       | Significance |
|                                | 31.065                      | 2.029                       | 15      | .000         |
| X                              | 11.176                      | .923                        | .569    | .112         |

5. Conclusions and Suggestions
We aim at the relevance between recruitment channels and employee relations, and the main findings are as follows:

1. There is a significant correlation between the selection of recruitment channels and employee performance, and employee relationship is related to employee's subjective initiative, job satisfaction and self dedication.

2. Most people’s cognition of the most effective recruitment channel is consistent with that of HR in the actual situation. They all think that the effectiveness of channels from high to low are acquaintance recommendation, online recruitment, campus recruitment, internal recruitment, headhunter recruitment and media recruitment.

3. The best entry channels for employees from different channels are headhunter recruitment, internal recruitment, media recruitment, online recruitment, campus recruitment and acquaintance recommendation.

4. The cognition of the employees who enter the company from different channels has nothing to do with the employees who enter the company from a certain channel.
Otherwise, for job seekers, how to find a job in a short time and reduce anxiety is an important proposition. Therefore, if we can know the most commonly used recruitment channel of HR, so as to know which channel is more likely to be found by HR, for job seekers, it can reduce a lot of unnecessary consumption. On the other hand, if HR can know which channel is the most efficient, it can speed up HR decision-making and solve the short-term recruitment dilemma to some extent.

In addition, HR is usually a relatively senior expert, because HR interviews numerous people in the recruitment work and also sums up a set of cognitive theory in many recruitment experiences. Through the survey, HR thinks that the best channel for recruitment effect is acquaintance recommendation. Then, if qualified candidates can find job opportunities through this channel, with acquaintance bonus and HR preconceived cognition, it can be used in order to increase the success rate of the interview. If the candidates have no relevant acquaintances, they will choose the campus recruitment channel. Of course, this is for students. If they are not students and have no acquaintances to recommend, they will choose the network recruitment with low cost and the third highest recruitment effect in HR.

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