

Research on Internet talent recruitment and talent management based on big data

Lirong Wan¹, Jiayong Xu^{1,2,*}

¹*Graduate University of Mongolia, Ulaanbaatar, 14200, Mongolia*

²*Beijing Polwision Technology Development Co., Ltd., Beijing, 100101, China*

**Corresponding author*

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Abstract: With the rapid development of the Internet, the Internet industry has a growing demand for talents. In order to recruit and manage Internet talent more efficiently, many companies have begun to use big data technology. Based on the method of big data analysis, this study discusses the new model of Internet talent recruitment and talent management. The study found that the ability and potential of candidates could be assessed more accurately, by analyzing social media activities, project experiences, skill tags, and other data. At the same time, big data technology can also help enterprises build talent recommendation system, optimize team building, employee performance evaluation and other aspects. By making full use of big data, Internet enterprises can better match the demand of talents, improve the recruitment efficiency and talent management level.

1. Introduction

With the continuous development and popularization of Internet technology, the Internet industry is becoming a hot field for enterprises to compete for. In this rapidly developing environment, the demand for Internet talents is increasingly booming. However, the recruitment and management of Internet talents faces a series of challenges. Traditional talent recruitment methods are often limited by time, space and information, and cannot meet the rapidly growing demand for Internet talents. And the traditional talent management mode can not give full play to the potential and creativity of Internet talents. Therefore, seeking a more efficient, accurate and flexible Internet talent recruitment and management mode has become an urgent problem to be solved.

In this context, big data technology has risen and been widely used in the field of talent recruitment and management. Big data analysis can deeply tap into the information, behavior and potential of talents, and help enterprises to more accurately evaluate the ability and suitability of candidates. Through the analysis of social media activities, project experience, skill tags and other data of Internet talents, candidates that can meet the needs of enterprises can be quickly selected, and more comprehensive talent management and training programs can be provided for enterprises. In addition, big data technology can also help enterprises build a personalized talent recommendation system and provide enterprises with more accurate talent matching services for enterprises. Through the application of big data, enterprises can better build teams, optimize the allocation of talents, and improve the efficiency of collaborative work. At the same time, big data

can also conduct a comprehensive evaluation of employee performance, and provide decision support and optimize management means for enterprises.

This study aims to explore the Internet talent recruitment and talent management mode based on big data to improve the competitiveness and innovation ability of enterprises in the Internet industry. Through the in-depth research and analysis of the application of big data in the Internet talent recruitment and management, we hope to provide useful experience and guidance for Internet enterprises, and promote the innovation and development of talent recruitment and management.

2. The application of big data in the recruitment of Internet talents

2.1 Social media data analysis

Social media data analysis is one of the important methods to recruit and manage Internet talents based on big data technology. With the popularity of social media and the rapid growth of users, people produce a large amount of data on social media, which contains a wealth of personal information, behavior patterns and interests. Analysis of these social media data allows for a more comprehensive understanding of the candidates' characteristics, capabilities, and potential for a more accurate assessment of their fitness and recruitment value.

Social media data analysis can help recruiters get a more comprehensive understanding of a candidate's personal background and experience. Information and photos posted by candidates on social media can demonstrate their educational background, work experience, professional skills and interests. Based on this information, recruiters can more accurately understand the candidate's professional background and work experience and determine whether they meets the job requirements.

Social media data analysis can reveal the social networks and influence of the candidates. By analyzing the number of followers, followers and interactive activities on social media, candidates can assess the influence and connections in the industry. This is particularly important for recruiting candidates with influence and social skills, as they can bring broader impact and collaboration opportunities for businesses.

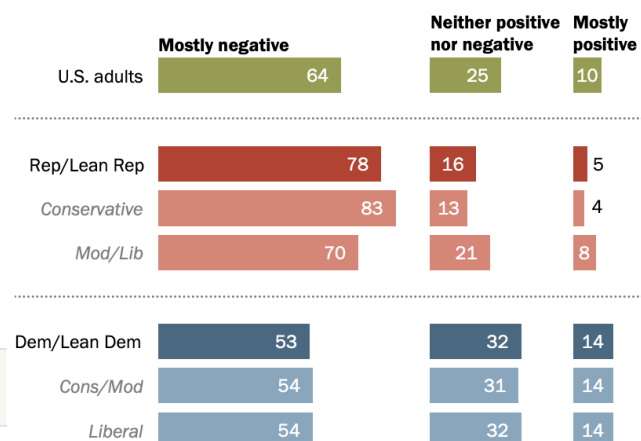
Social media data analysis can also mine candidates' skill tags and professional skills. The skills and expertise of the candidates can be identified by analyzing their posted content and participating discussions on social media. Based on these data, recruiters can more accurately judge the candidate's abilities and expertise, and choose the candidate most suitable for the job needs.

Social media data analysis can help companies build talent relationships and brand image. By interacting and communicating with candidates on social media, companies can actively connect with candidates and increase their visibility and attractiveness. In addition, by monitoring and analyzing candidates' social media activities, companies can understand the candidates' attitudes, values and behavior styles, thus better match corporate culture and values.

Social media data analysis plays an important role in the recruitment and management of Internet talents. By analyzing candidates' personal information, social networking, and expertise on social media, candidate suitability and recruitment value can be assessed more accurately. At the same time, social media data analysis can also help enterprises establish talent relationships and brand image, and improve the influence and attractiveness of enterprises in the Internet industry. By making full use of social media data analysis, enterprises can achieve more efficient, accurate and flexible Internet talent recruitment and management, enhance competitiveness and innovation ability (Figure 1).

Majority of Americans say social media negatively affect the way things are going in the country today

% of U.S. adults who say social media have a ___ effect on the way things are going in this country today



Note: Those who did not give an answer are not shown.
Source: Survey of U.S. adults conducted July 13-19, 2020.

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Figure 1: The current impact of social media on the United States

2.2 Mining of project experience and skill tags

In the Internet talent recruitment and management, project experience and skill tags mining is an important task. Analysis of the candidates' program experiences and skill labels allowed for a more accurate understanding of their actual work experience and professional competence, allowing for a better assessment of their suitability and recruitment value. The mining of the project experience can help recruiters understand the candidate's actual work experience and project outcomes. Analyobtain detailed information about the candidate's project experiences on their resume or online platform, project roles, project size, project objectives, and results achieved. This information can help recruiters judge whether a candidate has the required practical work experience, and assess their performance and ability in a specific project. The mining of the skill labels can reveal the candidate's professional competence and skill level. Candidates often list their skill tags on their resumes or online platforms, such as programming languages, software tools, domain knowledge, etc. By analyzing these skill tags, recruiters can get more accurate understanding of the candidate's skill background and professional abilities to determine their suitability for specific job requirements. With the help of big data technology, candidates' project experiences and skill labels can be further mined and analyzed. Processing a large amount of candidate data reveals some associations and characteristics hidden in the project experience and skill labels. For example, through cluster analysis, certain project experiences or skill tags can be found to be together, which can help recruiters identify some relevant project experiences or skill sets to better understand the candidate's comprehensive ability and potential.

The mining of skill labels can also help companies build professional teams and improve work efficiency. By analyzing the skill labels of candidates, candidates with specific skills can be identified and teams of professionals with diverse skills formed as needed. This helps enterprises to better allocate resources, improve work efficiency and cooperate in the face of various projects and tasks. Project experience and skill tags mining are crucial for Internet talent recruitment and management. By analyzing the candidates' project experience and skill labels, they can more

accurately evaluate their actual work experience and professional competence, and judge their suitability and recruitment value. Through the application of big data technology, you can also find the correlation between project experience and skill label, and help enterprises to build professional teams and improve work efficiency. Therefore, fully exploring and analyzing the candidates' project experience and skill labels is an indispensable link in the recruitment of Internet talent and management.

3. Application of big data in Internet talent management

3.1. Construction of the talent recommendation system

Talent recommendation system is an important tool built based on big data technology, aiming to help enterprises more accurately match candidates and job needs. Through analyzing and mining the candidates' personal information, skill background, work experience and interest data, as well as the understanding of job requirements, corporate culture and team needs, the talent recommendation system can provide the matching degree score between the candidate and the position, and recommend the most appropriate candidates to the enterprise[1].

The talent recommendation system evaluates the suitability of the candidate by analyzing their personal information and skill background. Based on the information provided by the candidate on the resume or online platform, including educational background, work experience, professional skills and certification, the system can conduct accurate analysis and evaluation of the candidate's ability and professional background. The system can use machine learning and data mining techniques to compare and match the candidate's personal information with the existing successful recruitment cases, which can generate a fit score for each candidate.

The talent recommendation system can also match the requirements of the candidate's work experience, project experience and skills according to the needs of the enterprise and the team requirements. The system can analyze the candidates' project experience, skill tag and work experience, compare them with the job requirements set by the enterprise, and give the corresponding matching degree score. In this way, enterprises can screen out the candidates who best match the job requirements through the system, saving time and human resource costs. Personal information and work experience, the talent recommendation system can also consider the candidates' interests and hobbies, in order to more accurately match the corporate culture and team atmosphere. By analyzing the candidate's activities, articles, interests and other information on social media, the system can understand the candidate's personal characteristics and preferences, compare them with the cultural values of the enterprise, and generate a fit score for each candidate^[2].

The establishment of talent recommendation system also needs continuous iteration and optimization. By collecting and analyzing user feedback and evaluation, the system can continuously learn and improve to improve the accuracy and reliability of matching. At the same time, the talent recommendation system can also use natural language processing and emotion analysis techniques to analyze candidates' resumes, cover letters, and interview feedback and other text information, to further improve the accuracy of the recommendation.

The talent recommendation system is an important tool built based on big data technology, which can help enterprises to more accurately match the candidates and job needs. By analyzing the candidates' personal information, skill background, work experience and interests, as well as the understanding of the needs of enterprises and team requirements, the talent recommendation system can provide the most suitable candidate recommendation for enterprises, and improve the efficiency and success rate of recruitment. Through continuous iteration and optimization, the talent recommendation system can continuously improve the accuracy and reliability of matching, and

provide better talent recruitment and management services for enterprises (Figure 2).



Figure 2: Overview of social media in Singapore 2019

3.2 Team formation and matching with talents

Team building refers to the combination of individuals with different abilities and backgrounds into an efficient and collaborative team through reasonable allocation of human resources and talent matching. The success of the team building directly affects the work efficiency and results of the team^[3].

The first step in team building is to determine the goals and tasks of the team. Team members need to be clearly aware of their job responsibilities and goals to identify the talent needs that the team should have. For example, if a sales team aims to increase sales, then the team needs to have members with high sales skills, good communication and coordination. The goal of a technical team is to develop new products, so the team needs to have members with strong technical expertise and outstanding problem-solving ability.

The second step in team building is to recruit the right talent. The recruitment process needs to formulate recruitment conditions and requirements according to the needs of the team, and extensively seek talents through recruitment channels. For example, suitable talents can be attracted and selected through online recruitment platforms, job fairs, talent markets and other ways. In the recruitment process, attention should be paid to whether the talents meet the requirements and culture of the team, and whether they can adapt to the working environment and atmosphere of the team.

The third step in team building is talent matching and allocation. After the specific talent needs are identified, applicants need to be interviewed and evaluated to ensure they have sufficient ability and experience to be competent for the job. At the same time, consider whether your personality, values and work style match the rest of the team to ensure collaboration and communication skills.

The fourth step in team building is training and development. Even if the right people are recruited, they need to be provided with training and development opportunities to improve their work skills and expertise. Training can include internal training, external training, and professional certification to provide opportunities for team members to learn and grow. At the same time, the communication and cooperation ability between team members can also be strengthened through regular team building activities and communication and sharing meetings.

The final step in team building is management and evaluation^[4]. Team leaders need to develop clear goals and work plans, and to monitor and evaluate the progress of team members. Through

regular performance evaluation and review, the shortcomings of the team members can be found, and corresponding measures can be taken to improve and improve.

Team building and talent matching is a complex and tedious process, but only through reasonable formation and matching, can we build an efficient and collaborative team. The mutual cooperation and cooperation between the team members will bring great impetus to the results and development of the team.

4. Benefits and influence of big data in Internet talent recruitment and management

The application of big data in Internet talent recruitment and management can bring many benefits and influences to enterprises. Through big data technology, enterprises can more accurately locate and attract suitable talents, and improve the efficiency and quality of recruitment. At the same time, big data can also help enterprises to manage and develop talents, and enhance team collaboration and competitiveness.

First of all, big data can deeply understand the needs and trends of the talent market through data analysis and mining, and provide targeted recruitment strategies for enterprises. By analyzing the massive recruitment data, we can understand the professional background, skill requirements and salary level of the talents, so as to determine the requirements and conditions of the recruitment positions. This can avoid the waste and misallocation of human resources, and improve the efficiency and success rate of recruitment.

Secondly, big data can accurately push appropriate candidates to enterprises through talent portrait and matching algorithms. Talent portrait is a comprehensive evaluation of candidates' ability and adaptability by collecting and analyzing multidimensional data such as personal resume, social media information, education background and work experience. With big data technology, companies can quickly select candidates who meet their job needs and invite them to attend interviews. This precise matching can greatly reduce the time and cost of recruitment, and improve the accuracy and effect of recruitment^[5].

In addition, big data can also help enterprises to train and manage their talents. Through the tracking and analysis of employees' work performance, training records, promotion process and other data, enterprises can understand the working ability and potential of employees, and provide them with corresponding training and development opportunities. At the same time, big data can also help enterprises understand the needs and wishes of employees, improve the working environment and incentive mechanism, and improve the work enthusiasm and satisfaction of employees through employee satisfaction survey and resignation reason analysis.

Finally, big data can also help enterprises to predict and plan their talents. Through the analysis of the development trend of the industry, the talent situation of competitors and the strategic needs of enterprises, the supply and demand situation of the future talent market can be predicted. According to these forecast results, enterprises can adjust their recruitment strategies in time, reserve and train talents in advance, in order to ensure the stability and sustainable development of their human resources.

5. Conclusion

The Internet talent recruitment and talent management based on big data can bring a lot of benefits and influences. By using big data technology, enterprises can more accurately locate and attract suitable talents, and improve the efficiency and quality of recruitment. At the same time, big data can also help enterprises to manage and develop talents, and enhance team collaboration and competitiveness. This enables enterprises to better cope with the fierce market competition and the changing demand for talents. The application prospect of big data in the field of Internet talent

recruitment and talent management is very broad, which will bring greater development opportunities and competitive advantages to enterprises.

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