

Analysis of Talent Ecological Environment Construction under the Background of Digital Transformation in Liaoning Province

Hui Wang^{1, a}, Meina Chen^{2, b*}

^{1,2} Dalian Neusoft Institute of Information, Dalian, Liaoning, China

^awanghui_xg@neusoft.edu.cn, ^bchenmeina@neusoft.edu.cn

Keywords: Talent; Ecological environment; Digital transformation; Analysis; Liaoning Province

Abstract. Constructing a favorable talent ecological environment is the basic requirement to achieve the goal of continuously economy and technology development with high speed. And it is an inevitable choice to cope with intense talent competition. This paper takes Liaoning Province as an example to analyze factors affecting the construction of talent ecological environment from the perspective of the component of eco-system. Through the analysis, it is much clearer about the current situation of the environment and it provide a better understanding of the characteristic and specific needs in Liaoning which will contribute the construction of the talent ecological environment.

Introduction

With the development of technology, the whole world starts the era of digital economy rapidly. Gartner Inc predicts that, by 2020, 75% business of most companies would be digital, or on the way to be digital. In the era of “Internet+”, the digital transformation of enterprises has become a focused issue. In 2018, General Secretary Xi Jinping emphasized that development is the first priority, talents are the first resources and innovation is the first motivation. In the research of attract and maintain talents, Talent ecological environment come into notice of researchers. The competition of talents is the competition of talent ecological environment in nature. Favorable talent ecological environment can improve the ability of obtain and maintain talents of strategic emerging industries. Furthermore, it can alleviate the phenomenon of the loss of talents in strategic emerging industries and promote development of the industry [1].

Liaoning Province is a traditional industrial base in China and is in the process of transformation because of development requirements. Due to the limits of history and objective condition, there is a gap of talents cultivation and obtain between other developed areas and Liaoning and it has a strongly impact on the reform of transformation of industry and the structure of economy.

This research will focus on the talent needs of enterprises that are facing digital transformation and analyze the main factors affecting talents loss and maintain in Liaoning Province accordingly. On the base of big data analysis, constructing the talent ecological environment based on digital transformation by using the method of empirical study.

Methodology

Talent ecological environment refers to the unity integrated with talent, talent population and talent community and developed during the process of continuously matter cycle, matter flow and information transmission within the living and working areas of talents [2]. Talent ecological environment is an important part and research area of talent ecology. It has the similarity to natural ecological system and has the peculiarity because of the differences of human beings’ subjective initiative and the environment created by labor practices [3].

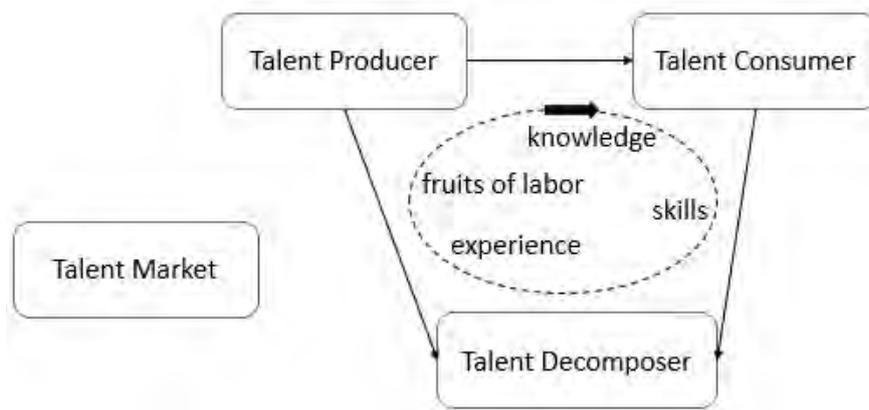


Figure 1. Talent ecological environment

Results and discussions

Current situation of talent market under the tendency of digital transformation. According to the research, most digital talents are found in first-tier cities. More than 50% of digital talents are distributed in the industries of Internet, information communication and the rest of them are distributed in manufacturing, financial industries and so on [4].

Under the background of accelerated innovation and deeper integration of global digital economics, the development of digital economy focuses more on production field than consume field. Therefore, digital talents are transmitting from fundamental industries into integrated industries [5].

Liaoning has a long history of manufacturing industry because of valuable resources inside the province. There are urgent digital talents needs in order to begin the transformation of digit, especially digital talents in manufacturing industry. And with the growth of digital industry, besides basic programming skills, companies pay more attention to the integrated skills such as management and leading.

Current situation of talent ecological environment. Using the methodology mentioned earlier to describe the current situation of the talent environment in Liaoning.

The main talent producers are families and educational institutions in Liaoning. There are 116 colleges, 5 key laboratories and 8 research center. These institutions play the most important roles in cultivating and providing talents to local enterprise. According to the population survey in 2015, the amount of population is on the rise. There are 7.146 million people who graduate from college and the number is still increasing with time goes by.

The main consumer of talent is the enterprises in Liaoning. By 2017, there are more than 700 thousand enterprises. Among these enterprises, industry of retailer, manufactory, renting, construction, science research and technology service are ranked top 5 of all industries.

The talent decomposer is related to the exit mechanism and policy in Liaoning. This part in the environment will affect the passion and motivation for talents inside the environment.

Analysis of the construction of talent ecological environment. According to the development of digital industries and the needs of digital talents, the government should be more specific in attracting and cultivate digital talents [6]. To establish more effective talents introduction and cultivation system based on needs. Liaoning Province should build the advantage of traditional resource and industry and marketing innovative ecological environment to provide assurance condition to attract digital talents.

The model is based on economic construction and oriented by culture. Under the assurance of policy and social environment, implement the construction of talent ecological environment. This model will provide comprehensive advice to the government to promote the development of talent ecological environment.



Figure 2. Construction of talent ecological environment by government

(1) Policy analysis

Currently, the most direct and effective way to fight high-end talent is to implement talent policies. Talent will flow to wherever have better policies [7]. Liaoning Province has brought out a lot of talent policies besides those brought out by the whole nation. These policies focus on attracting high-end talents, especially those with innovative abilities. Also, there are assurance policies to maintain talents.

(2) Economy analysis

The government brought out clearly that by 2020, China is to become an innovative country. Our nation will adjust industrial structure and it needs to transform from labor concentrated industry into knowledge concentrated industry. Therefore innovative talents are more important than ever before [8].

Liaoning is a traditional industrial base because of abundant resource. Facing the challenge of rapid development throughout all industries, the government takes several actions to revive the economy which offers the talent ecological environment construction great convenience. The actions includes reforming and updating traditional industry, encouraging innovation, increasing the proportion of service industry and promoting industrial competition. To implement these economical actions, the priority is to construct a favorable ecological environment.

(3) Society analysis

The construction of good talent ecological environment requires to be oriented by Chinese Dreams and under the background of high-quality living environment. The realization of the Chinese Dreams relies mostly on talents while the talents need good talent ecological environment to play their important roles. The Chinese Dreams emphasizes on the personal value orientation which has a key impact on the formation of talent ecological environment. At the same time, the quality of living environment has an important influence on the choice of talent flow. Among the policies related to attract talent, there are a lot information about improving living condition, health-care assurance and so on. These characters will also be important factors to evaluate living environment [9].

(4) Culture analysis

Cultural environment has unique impact on the optimization of talent ecological environment and as the important supplement of material factors, normally has the crucial effect [10]. In the culture level, there is an emphasis on “respect” and “learning”. The learning atmosphere will improve the comprehensive quality of talent to meet the environment needs.

(5) Building of enterprises’ talent ecological system

At the same time, enterprises need to build an inside talent ecological system in favor of the development of related digital talents. Enterprises’ talent ecological system is a unity of inner talent, organization and outside environment.



Figure 3. Construction of talent ecological environment by enterprise

Summary

This paper analyzed the need of talents to implement the digital transformation based on the characteristics of Liaoning and also analyzed factors affecting the construction of talent ecological environment in Liaoning objectively. Through these analysis, it is clear that Liaoning has done a lot of fundamental work for the construction of the environment. But there is a lot more need to be done to perfect the construction. It is not just the government. The enterprise need to coordinate by building a favorable inside environment to attract and maintain talents. At last, this paper brought out the construction model of both government level and enterprise level. It would provide basic information to further research on the construction of the talent ecological environment.

Acknowledgement

Fund program: The construction of talent ecological environment based on digital transformation in Liaoning Province, L18ARK001, Disciplinary Projects Supported by Social Sciences Fund of Liaoning Province.

References

- [1] Cheng Liqun, Yu Xiao, Countermeasure research of optimization of talent ecological environment of economic and technological development zone, *Human Resource Management*, 2018, 01, 339-341.
- [2] Li Yue, A Study on Ecosystem of East Lake National Independent Innovation Demonstration Zone, *Huazhong University of Science & Technology*, 2012,5.
- [3] Gu Ran, Shang Hua, Construction of evaluation index system of talent eco-environment based on ecological systems theory, *CHINA POPULATION RESOURCES AND ENVIRONMENT*, 2017, s1, 289-294.
- [4] Liang Wenqun, Hao Shixiao, Niu Chonghuai, Evaluation and Comparison of Development Environment of Regional High-level Scientific Talents in China, *Science & Technology Progress and Policy*, 2014, 09, 147-151.
- [5] Zhang Bo, A Comparative Study on the Ecological Environment of Talents in National Independent Innovation Demonstration Zone, *Scientific Development*, 2017, 07, 5-13.

- [6] Shang Hua, Hui Shancheng, Zheng Xiangcheng, Research on the evaluation of cities human resource ecosystem in Liaoning based on the ecological niche model, *Science Research Management*, 2014, 11, 156-162.
- [7] Liu Ruibo, Bian Zhiqiang, Study on Evaluation System of Science and Technology Talent Social Eco-environment, *China Population Resources and Environment*, 2014, 7, 133-139.
- [8] Xu Guifang, Yan Daojin, Innovation-driven Comparative Research on Three National Independent Innovation Demonstration Zones, *Regional Economic Review*, 2017, 2, 93-98.
- [9] Liu Lijun, Xu Shanshan, Litao, Inspect of current situation of talent environment in Liaoning Province, *Liaoning Economy*, 2015, 6, 28-29.
- [10] Yan Aimin, An introduction to human resource ecosystem: Preliminary study on construction and application system, Beijing, 2011.