

Research and Analysis on the Influence of Technological Progress on Employment in the Era of Artificial Intelligence

Xinxin Dong

Party School of the Central Committee of C.P.C (National Academy of Governance) Graduate School,
Beijing, China

dong166xin@sina.com

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Abstract: The development of artificial intelligence promotes the development and progress of society, and at the same time, it also brings both positive and negative effects on employment. In view of this, this paper analyzes the relationship between technological progress and employment in the age of artificial intelligence, the impact of technological progress on employment and relevant countermeasures, hoping to provide valuable reference for improving the current situation of employment in China and promoting technological progress in the age of artificial intelligence.

1. Introduction

The employment structure and talent training direction should meet the needs of social development. Under the influence of technological progress in the artificial intelligence era, the supply and demand of the labor market has also changed. In view of this, we should make targeted adjustments from the aspects of talent training, enterprises and national policies, so as to match the technological progress and development in the current artificial intelligence era, and provide favorable condition for the continuous development of science and technology, and the cultivation of talents suitable for the development of the times.

2. Relationship between Technological Progress and Employment in the Era of Artificial Intelligence

The progress of artificial intelligence technology has largely replaced human labor, reducing the dependence on human labor, so many employees with low professional skills are gradually eliminated. In this case, educational institutions and personnel training structure have gradually adjusted the direction of personnel training, and special training based on artificial intelligence technology training has emerged, so the progress of artificial intelligence technology has changed the employment structure and direction, and also put forward new demands for training talents. From the perspective of employment, in recent years, the employment situation in China is not optimistic. Many college graduates, even with high educational background and high skills, are also facing the difficulty to find a job. In this case, the progress of artificial intelligence technology provides new ideas and new jobs for college graduates, enlivens the job market, but also puts forward new challenges for employment, that is, college students are facing the new requirements of learning artificial intelligence technology. However, not all college students have the basis to learn the technology of artificial intelligence era. Many liberal arts students do not have the basic mechanical knowledge because of their weak mathematical and chemical foundation, which makes them more difficult to learn the technology of artificial intelligence. In addition, education is greatly affected by the vane of the labor market. Therefore, when the labor market is biased towards the demand for artificial intelligence talents, colleges and universities will produce artificial intelligence majors and produce a large number of artificial intelligence talents. Due to the neglect of the matching degree with the labor market, there will be a surplus of artificial intelligence talents. Therefore, it can be seen that the progress of the era of artificial intelligence brings employment

opportunities, but it also brings negative effects. In this regard, we should give full play to the positive influence of artificial intelligence to alleviate the employment pressure faced by our country.

3. Influence of Technological Progress on Employment in the Era of Artificial Intelligence

3.1 Great Differences in Technological Progress between Regions in the Era of Artificial Intelligence

The development of artificial intelligence is inseparable from the development of other science and technology, especially the development of computer information, software and so on. These technologies provide favorable conditions for the development of artificial intelligence. It is precisely because the development of artificial intelligence technology is highly dependent on science and technology, which leads to the unbalanced development. Some developed areas, with advanced scientific and technological support, provide favorable conditions for artificial intelligence technology. However, some areas with backward economic, scientific and technological development are difficult to realize artificial intelligence because the basic technical facilities and equipment do not have advanced technical support. The development areas of artificial intelligence in China are mainly concentrated in the first-tier cities. The main characteristics of these cities are the rapid development of science and technology, and a large number of talents. Not only the development of science and technology can meet the development needs of artificial intelligence, but also the employment can meet the development needs of artificial intelligence. This situation is of great significance to promote the development of artificial intelligence technology. However, in the process, there is a bad phenomenon of unbalanced development, which has a negative impact on promoting coordinated economic development and ensuring balanced employment among regions, and also forces some talents with special artificial intelligence technology to rush into big cities for employment.

3.2 Adjustment Faced by Employment Structure of Labor Market

From the supply of labor market in recent years, the labor market has not occupied a dominant position, and the labor supply has been in a state of imbalance between supply and demand. Although the supply of talents in the labor market has gradually eased in recent years, the contradiction between supply and demand has not been solved, and there is still a large number of labor surplus in colleges and universities. On the one hand, it reflects that the talents trained in colleges and universities in China are not trained according to the market demand, so the talents in colleges and universities can't meet the market demand for talents, and smoothly step into the job from the school. On the other hand, it also shows that the continuous progress of science and technology, especially the development of artificial intelligence, has led to the gradual weakening of the dependence on human labor, so the demand for human labor is decreasing. In this case, great changes have taken place in China's employment structure and personnel training direction. In employment, technical talents are easier to obtain employment, while low-skilled talents are more difficult to obtain employment. In the direction of personnel training, it also attaches importance to cultivating special talents of artificial intelligence, computer and other technologies. It can be seen that China's labor market is facing adjustment and change, and only the talent structure and employment structure suitable for the current social development can expand the scope of employment and meet the employment needs of more people. Therefore, this change is of great positive significance to promote the development of artificial intelligence and related technologies.

3.3 Mismatch between Technology Growth and Talent Supply in the Era of Artificial Intelligence

According to the relevant data, the development of artificial intelligence has shown a steady

growth after 2019, and in the future, with the continuous development of science and technology, the growth momentum will continue unabated. From the perspective of China's talent supply, although college graduates will show a sustained growth, the growth of labor is not large. We can see that there is a surplus of labor force. However, this phenomenon does not match the development speed of intelligent technology. Many labor forces are eliminated because they can't meet the market demand. But science and technology, artificial intelligence are continuous improving, even if the schools change the direction of personnel training, make adjustment of talent structure, it is still difficult to match with the development of artificial intelligence technology. Therefore, from this point of view, with the continuous growth of artificial intelligence technology, the supply side in the labor market may be at a disadvantage. Although there are many labor resources, it can't meet the talent demand.

4. Analysis on Employment Countermeasures for Technological Progress in Artificial Intelligence Era

4.1 Vigorously Develop the Technology Industry Related to Intelligence, Promote the Harmonious Development of Intelligent Technology Region

From the above analysis, it can be seen that the current development of intelligent technology in China is unbalanced, which has a greater impact on employment. In view of this, we should first promote the development of modern technology in a broad sense, realize information office, improve the scope of use of computer technology, and provide favorable conditions for promoting the development of artificial intelligence technology. Due to the influence of many factors, the improvement of technology development may not be able to compete with the developed regions in a short time, so there will still be regional differences in the development of intelligent technology. Secondly, in order to adapt to the needs of the development of artificial intelligence, it is necessary to change the direction of talent training, and build a talent training system suitable for the needs of the labor market and the development of artificial intelligence technology. In addition, in order to realize the artificial intelligence, we should build facilities matching with its development, and strive to realize educational intelligence, medical intelligence, home intelligence, robot intelligence, etc., so as to provide guarantee for the continuous promotion of artificial intelligence.

4.2 Optimize the Structure of Labor Force and Personnel Training

With the continuous development of artificial intelligence, the structure of labor force is facing changes, and the direction of talent training also needs to be adjusted at the right time. At present, the demand for talents in the society has changed from the single labor to the comprehensive talents with technology and skills. In view of this, labor should first recognize the current changes of the times, and base on the needs of their own technological development, constantly improve themselves by education, training and other investment methods to match their own development with social development, so as to provide a strong guarantee for promoting individual employment. Secondly, in order to meet the development needs of the market and realize the intelligent development of the enterprises, the enterprises should carry out comprehensive artificial intelligence training for the employees, and the employees should establish the concept of lifelong learning, understand the new trends of the development of artificial intelligence in real time, so as to lay a solid foundation for promoting the development of individuals and enterprises. In addition, as the main regulator of the labor market, the government should give full play to its management advantages, increase the training of artificial intelligence talents, establish the wind vane of scientific and technological development, and urge schools and training institutions to adjust the direction of talent training.

4.3 Increase the Cost of Manpower Training to Meet the Needs of Technological Development

in the Era of Artificial Intelligence

Although the development of artificial intelligence has replaced a lot of human labor, human is still the driving force to promote the development of the times. Only by cultivating professionals matching the development needs of the times can we promote the progress of the times. In view of this, first of all, the government should change the direction of talent investment, increase the research efforts on artificial intelligence, especially on the investment in colleges and universities, set up artificial intelligence specialty, and increase the investment in matching specialty to meet the needs of the development of artificial intelligence. In addition, as the cultivation of artificial intelligence talents involves more teaching equipment, relevant departments should provide financial support for the development of artificial intelligence. Secondly, enterprises should realize the docking with the development of artificial intelligence, not only from the technical development level, but also from the aspects of talent recruitment and training, so as to meet the needs of the development of artificial intelligence. In addition, from the perspective of personal development, we should find our own development direction based on the development needs of the times, and realize the docking with the technology development in the era of artificial intelligence by constantly improving our own skills.

5. Conclusion

The development of artificial intelligence provides people with the direction of employment, new jobs, but also brings changes in employment structure and talent training direction. In view of this, we should comply with the trend of artificial intelligence development, and actively adjust the development strategies of enterprises, individuals and the government, so as to provide favorable conditions for supplying talents needed by the society.

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