



## Consideration of Innovating Cultivation Mode for Electronic Commerce Talents in China

Weiyue Liu<sup>1\*</sup>

<sup>1</sup>Department of industrial and commercial management, School of Economics and Management,  
Tianjin Chengjian University, Tianjin 300384, China.

### Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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### ABSTRACT

Social and economic development is more and more inseparable from the electronic commerce. The e-commerce is widely applied in various industries. Development for the e-commerce leads to the talent demand, and Chinese universities supply a lot of e-commerce graduates to market every year. However, although e-commerce talents are still in a short supply in the market, the e-commerce graduates in Chinese colleges and universities encounter a situation that they can't find the suitable working position. The demanders always lack of talents and the suppliers always look for jobs on the market. This is derived from supply and demand dislocation for the talents. By analyzing the professional training objectives and cultivation mode, major background and technical requirements of the e-commerce, it is realized that there are lacks of a targeted market and lacks of practical guidance of enterprises in the training of the college e-commerce graduates. In this paper, based on the discussion of differences for both supply and demand sides in the ability of recognition and trust, the sources of the dislocation is analyzed and the author puts forward to solve to the supply and demand dislocation for the e-commerce talents based on the interaction of all the social parties.

\*Corresponding author: E-mail: [a12995@163.com](mailto:a12995@163.com);

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## 1. INTRODUCTION

The electronic commerce plays more and more important role in driving nation economic development. The development for the e-commerce leads to the talent demand. Chinese universities supply a lot of e-commerce graduates to market every year. However, although e-commerce talents are still in a short supply in the market, the e-commerce graduates in Chinese colleges and universities can't find the suitable working position. The paper is aimed at analyzing the phenomenon and putting forward proposals. The following objectives are included in this paper:

First, a status of e-commerce graduate employment is found from literature review, in order to understand a general problem of the employment and to give an brief summary to authors' findings and visions;

Second, cultivating objectives of the e-commerce in Chinese universities are comprehensively described so as to find their similarities and differences;

Third, an interview with experts is done for getting their opinions and insights;

Finally, proposals are put forward.

## 2. DOMESTIC FOCUS ON ELECTRONIC COMMERCE

For scale of Internet users, China had more number than the United States in June of 2008 and became the country with the largest number of Internet users. The number of Chinese Internet users has increased from 338 millions in June 2009 to 632 millions in July 2014, which maintained a relatively high growth rate. By the end of June 2013, the growth speed for the farmer users is very fast and Internet users of the rural population accounted 165 million, about 27.9% in all. Especially in the online shopping population, net purchases per capital in no-bigger cities are above one in bigger cities. Chinese Internet penetration rate is 44.1% in 2013. Although there exists certain gap in comparison with the United States, Japan, South Korea and other developed countries, a rapid growth is still maintained [1].

China has formed Internet economy with a characteristic of a large and rapid development. Chinese Internet economy accounts for only 3.3% of China's GDP in 2010, and lags behind most developed countries. But by 2013, the ratio had risen to 4.4%, reached the level of the world's leading countries, and was higher than the United States, France, Germany and other developed countries. With China towards a new digital era, the Internet will likely contribute from 7% to 22% to China's GDP growth in next decade [2].

Data released by the ministry of commerce show that China's total e-commerce transactions have exceeded RMB 10.2 trillion in 2013, up 31.2%; among them, the retail sales in network are over RMB 1.88 trillion, up 42.8% year on year, equivalent to 8.04% of the total retail sales of social consumer goods [3]. The strong momentum of electronic commerce development in our country injects vigor for Chinese economic development and brings the convenience for the national life. This opportunity has created millions of jobs of e-commerce and also makes e-commerce talents in a status of short supply. According to a report in the first half of 2008 [4], the e-commerce talents demand into popular. Currently, millions for e-commerce specialized personnel are needed on the Chinese market [5,6]. Organizations to demand the e-commerce talents are not only limited to professional industry websites, such as Alibaba, Dangdang and Joyo, but also include almost all industries, such as manufacturing, assembly, energy, transportation, finance, telecom, media, education, tourism, logistics and so on. With the rise of wisdom city and the development of intelligent building, especially promotion and implementation of a new round of the construction informatization technology represented by BIM (building information model), the construction industry has become one of industries to demand a mass of the electronic commerce talents.

Social demand for electronic commerce talents is so great. However, the e-commerce graduates in Chinese colleges and universities have no advantage in employment choice. They still bear the employment pressure and will also be subject to difficulty finding a job suitable. This situation is not uncommon and a similar situation occurs for almost every college, or in almost every region.

In 2012, the e-commerce in higher vocational colleges becomes one of the top ten specialties to obtain employment the most difficulty [7]. The employment rate for e-commerce undergraduate in colleges and universities has become less optimistic. Analysis is to find that the students' employment concept is conservative and more prominent is the issue of the supply and demand dislocation for the e-commerce talents.

On one hand, a lot of organizations post in hiring, and on the other hand, millions of the graduates seek for jobs. This kind of situation not only reveals problems of talent cultivation mode in Chinese higher education, but also reflects a fact that the function of e-commerce and ability of the e-commerce talents are overestimated. It should be paid the attention and reflection by the educational circle and the social parties.

In his paper, Li Min pointed out that with the rapid development of electronic commerce in China, the electronic commerce talent gap changes bigger and bigger. However, employment rate of the electronic commerce in colleges and universities graduates is far lower than the overall employment rate [8]. The social parties must pay attention to this.

Based on an analysis of the present situation of electronic commerce talent cultivation in colleges and universities and a study of the successful experience for universities abroad, Liu Lan etc. proposed that taking the student as the center, and the combination of in-class and after-class, and the combination of teaching and research should be considered as the core values of innovation ability training for the e-commerce talents in colleges and universities, so as to construct multi-dimensional practice education system and to cultivate innovation ability of the e-commerce talents [9].

By applying the collaborative theory, Lu Zhangcheng proposed the new framework of compound high-skilled e-commerce talent training, emphasizing university-enterprise cooperation to form compound ability structure, so as to make innovation on electronic commerce talent cultivation mode in theory and practice [10].

Gu Yixun analyzed the talent shortage faced in e-commerce industry and low rate of students' employment and put forward to adjust electronic commerce talent cultivation mode according to the market demand [11].

In his paper titled as 'An Inquiry into the cultivation of e-commerce talent with employment as orientation', Zhongcheng Liu analyzed the present situation of Chinese electronic commerce talent's demand and e-commerce graduate's employment situation. He suggested that taking employment as the guidance adjusts electronic commerce talent cultivation in colleges and universities and put forward employment solutions focusing on training and improving students' ability [12].

In their paper, Rong Shulin etc. discussed the e-commerce talent's supply and demand and the status of the enterprise to e-commerce talent's demand, emphasized on combination of enterprise's core competitiveness with the e-commerce in order to solve the enterprise recruitment difficulty [13].

NingKai pointed out that employment rate of the electronic commerce graduates is very low and their employment is difficult. Graduates from many colleges and universities are not accepted by the corporate. Colleges and universities should timely adjust e-commerce training mode and strengthen their own training [14].

Based on the idea of cultivating the ability for creativity, innovation and entrepreneurship, Yao Juan etc. put forward a cultivation mode for e-commerce talents, which is oriented by demand and the project [15].

Supply and demand status for the electronic commerce talents relate to the national economic and social development. Employment level of electronic commerce graduates reflects modernization process of a regional development way and the ability of the colleges and universities to adapt to the social development, which caused the extensive concern and deep study of the social parties. Other scholars [16-20] with the enthusiasm contribute to the development of e-commerce business and look forward to its further development, in order to solve the problem of poor employment of the e-commerce graduates and call for the attention of the society and government [21-31].

As described above, local experts from universities and enterprises paid attention to e-commerce talents in China. The talents' function in social economic development is highly appreciated. The experts' focuses are summarized as below.

90% experts made sure that the market demand for the e-commerce talents in China is very high. At the talent market, demand for e-commerce talent is more than its supply. However, Chinese universities cultivate more than 50 thousands of e-commerce graduates every year. Very few of e-commerce graduates are able to meet social requirement.

All experts considered that there is a problem for cultivation mode in China. The problem was thought to result from a dislocation from need of e-commerce development in China society. This is a structural conflict of supply and demand. In order to solve the conflict, the experts proposed that the cultivation mode in China must be adjusted and changed. However, the proposals are mainly focused on adjusting curriculum and increasing practice teaching, not involving social linkage.

Table 1 shows that authors B through H put forward to build up a new cultivation mode. The authors B and E emphasized students' ability. The authors D, E, F and G also focused on the market demand and enterprise requirement. Author A noticed that employment rate of the e-commerce graduates was very low, far lower than the overall employment rate and so pointed out the importance of a cooperation of the social parties.

### **3. THE ANALYSIS OF ELECTRONIC COMMERCE MAJOR TRAINING OBJECTIVES OF UNIVERSITIES**

In the process of transforming into the new industrialization in China, a large number of high-quality electronic commerce talented persons are needed. In order to meet the requirement of the era development, more than 1000 colleges and universities in China [4] successively set up e-commerce and its relevant majors. The students' training target is determined. The target determined by most colleges and Universities focuses on the students' cultivation in the field of vision, integrity, and world outlook, etc.

Training objectives for the electronic commerce major of a university in east China are described as: the major is aimed at training the high quality specialized talents in the basic research and innovation application field of e-commerce with a field of vision of modern economics, the vision of the international economics and a perspective view of the information society, who have keen sensibilities and creative to the electronic

commerce activities, able to skillfully apply modern economic theory, e-commerce and information technology, and possess exploration ability and innovation and the entrepreneurial spirit.

A university in China northwest region sets e-commerce training objectives as: the students must possess knowledge related to professional management, economy, law, computer, electronic commerce, have humanistic spirit, scientific literacy and credit quality, be able to be engaged in web page design, website construction, maintenance, enterprise marketing planning of goods and services, customer relationship management (CRM), e-commerce project management, in such areas as urban construction, circulation of commodities, the network transaction management departments at all levels, industrial and commercial enterprises, financial institutions, scientific research units and other departments.

For a university in north China, the training objectives for the e-commerce are described as: this major focuses on developing students' ability on the basis of computer science and e-commerce application oriented. The training is aimed to meet the need of socialism, the comprehensive development of moral, intellectual, physical and aesthetics, to obtain the basic training of e-commerce engineers and operation management and to master the basic theories, basic knowledge and basic skills of computer science and electronic commerce, so as to make students be engaged in scientific research, development and application in the field of e-commerce.

It is found that language description for the training goal is very concise and accurate. The total training goals for any specialty in colleges and universities are generalized. Through analysis, however, it is not hard to find that the text is a sample. As long as the major titles are changed, the goal descriptions will be applicable to all majors. The training goal only pays attention to the blueprint drawing of ambitions, blurs accurate positioning of the training direction and ignores the specific implementation of training objectives. The training goal is not combined with the specialty background, does not highlight the major characteristics, is not aimed at the needs of the society and is not adapt to the era development.

Electronic commerce involves a lot of professional fields and it is a new cross-

disciplinary, which combines with computer science, marketing, management, law and modern logistics. It is not a simple combination of the related subjects. It has their own characteristics with relatively independent knowledge system based on the fusion of various related disciplines. At present, the universities set up the e-commerce specialty under different disciplines. Some belongs to management discipline, some to the economic discipline, and some to computer science or intelligence science, etc. Therefore, any discipline cannot cover all knowledge system and technology of the electronic commerce.

A broad direction and discipline characteristics of the electronic commerce require colleges and universities to make clear and accurate positioning to the specialty. A 'universal' target cannot be used to substitute the e-commerce training goal. The electronic commerce is involved in such three aspects as basic technology, business applications and comprehensive management. Setting curriculum for the e-commerce specialty in colleges and universities should be based on different professional positioning, and so cannot be treated as the same.

**Table 1. Summary of literature review**

Ref. No.	Author No.	Author Name	Problem they found	Proposals they gave	What they focused on
[8]	Author A	Li Min (2012)	Very low employment rate of the e-commerce graduates, far lower than the overall employment rate	The social parties must pay attention to this.	cooperation of the social parties
[9]	Author B	Liu Lan et al. (2012)	Little emphases to cultivate innovation ability of the e-commerce talents	New cultivation mode emphazes on the combination of in-class and after-class and the combination of teaching and research.	New cultivation mode
[10]	Author C	Lu Zhangcheng (2012)	Cooperation with university and enterprise is loose.	to make innovation on electronic commerce talent cultivation mode in theory and practice.	New cultivation mode
[11]	Author D	Gu Yixun (2013)	electronic commerce talent cultivation mode	Adjust electronic commerce talent cultivation mode according to the market demand	New cultivation mode
[12]	Author E	Zhongcheng Liu (2012)	students' ability	Adjust electronic commerce talent cultivation in colleges and universities	New cultivation mode
[13]	Author F	Rong Shulin et al. (2011)	enterprise recruitment difficulty	combination of enterprise's core competitiveness with the e-commerce major	New cultivation mode
[14]	Author G	Ning Kai (2012)	Graduates from many colleges and universities are not accepted by the corporate.	Adjust e-commerce training mode and strengthen their own training.	New cultivation mode
[15]	Author H	Yao Juan et al. (2011)	cultivation mode	Build up a cultivation mode for e-commerce talents oriented by demand and the project.	New cultivation mode

E-commerce services the economic construction. The development of the society is more and more inseparable from the electronic commerce. E-commerce has become an important way to transaction of social flow of goods and services. Global e-commerce transactions are in high-speed growth year after year, online retail sales in the proportion of total retail sales of social consumer goods are more and more big, and more and more enterprises or government departments choose and utilize electronic commerce. The process has provided the electronic commerce with broad development prospects and space. At the same time, it has provided with vigor for development of Chinese colleges and universities. The colleges and universities should closely combine e-commerce professional education with society's need. From the perspective of social need and the professional development, colleges and universities adjust and establish the training goal for the e-commerce specialty which can highlight the characteristics.

At the same time that all technologies involved in the electronic commerce are developing at very fast speed, the e-commerce promotes the development of the society in various fields and industries. Whether it is a computer technology, communication technology, the Internet of things technology or management technique, every technological development influences the development of electronic commerce. So, the cultivation targets of the e-commerce major must keep up with the pace of The Times development, absorb research achievements of frontier technology, and timely adjust course content, teaching methods, teaching staff and training mode.

#### **4. ROOT CAUSE ANALYSIS OF DISLOCATION FOR ELECTRONIC COMMERCE TALENT SUPPLY AND DEMAND**

Although e-commerce professional talents are in shortage on the market, the employment situation of the electronic commerce graduates of colleges and universities is not optimistic. Few of the e-commerce graduates feel joy in finding jobs. Most of them will encounter the trouble that they are unemployed after graduation and even can't find jobs. In recent years, employment rate of the e-commerce graduates is lower than the national average level of university students' employment. Obviously, the dislocation occurs for supply and

demand of the e-commerce talents and its causes are various.

The employer's requirements do not match with the students' skills. During transformation of enterprises to electronic commerce, the employer overestimates the ability and the function of e-commerce platform. Companies believe that e-commerce development can produce immediate effect, will get investment returns in short-term, and reduce the risk of enterprise investment. This will increase employer's expectations to the e-commerce talent's contribution and role, and also overstate the dislocation of the e-commerce talent's knowledge and skills. There is a big contrast between theoretical knowledge taught at colleges and universities and practical skills required by the enterprise. The contrast results in a mismatch between the employer's requirements and the students' skills. [7,32].

Both sides of the supply and demand do not have enough trust with each other. Electronic commerce has become an energetic information technology and services industry with prospects. Under the development situation, demand for high-level specialized talents is increasingly urgent. A kind of employers, also including the enterprise, have not come up with a clear standards and requirements in choosing and hiring such talents. Both sides of the supply and demand are unable to establish relationship with a fully trust. This will result in the phenomenon that the demander is always hiring the e-commerce talents, and the supplier is constantly looking for jobs. The phenomenon leads definitely to the dislocation for the talent supply and demand.

The e-commerce graduates lack of confidence and expectations to the prospects for the professional development. In the process of formation or transformation of employment idea, graduates do not consider the professional features, advantages and prospects of the e-commerce industry. E-commerce professional knowledge system includes very strong background of economics, management science, operational research, enterprise operation and marketing, in addition to the background of the computer technology, communication and network technology. However, there is no enlightenment education system or curriculum special for employment consciousness in colleges and universities. Even though having studied systematic and professional e-commerce

knowledge, graduates are also easy to ignore the professional background and accomplishment in the course of employment consciousness forming. Their fuzzy understanding of the professional outlook makes uneasily them have the right judgment and expectations. As a result, their viewpoint of employment is generally consistent with others.

Graduates lack the height of cognition to the new types of employment. In the next five years, all economic entities will have to participate in electronic commerce activities. E-commerce will infiltrate to all aspects of national economy, which will bring abundant, flexible types of employment. These forms include e-commerce-related jobs in various fields of industries, and marketing, intermediary services at public e-commerce platform, and a proprietary self-employment at e-commerce platform. In the face of new form and opportunities of employment, the graduates have no initiative attitude and no positive action.

The correction of the supply and demand dislocation lacks the concerted efforts of all the social parties. At present, some training institutions provide with skills training for college students. Based on the needs of the enterprises, the institutions arrange special technical training, aiming at improving the employment ability of the college students, increasing their employment level, and meeting the needs of their employment. Many institutions directly link with enterprises to hire talents, and provide one who qualifies training with employment opportunities. It achieves to a certain degree. But, all fees of the social training shall be borne by the students, and cost is very high. This increases the economic cost of family. In addition, Universities have no any measures to guide and support the student to participate in such social training. Local education departments have no relevant policies to encourage the action. The number of graduates participating in the training is limited, social influence is not significant, and the correction of the dislocation between the supply and demand goes to little effect.

An interview with about 70 experts was processed in the research and indicated that the research result was confirmed to be rational. The experts are from universities, enterprises and administration agencies, such as Tianjin University, Taobao e-commerce Company, Suning O2O Company, etc. Of them, 15 persons are engaged in teaching work, 20 in researching work, 23 in operating work and the other 12 in

managing work for the electron commerce field. During past 2 years, there were many meetings related to e-commerce operation held by local administration. The research was based on an in-depth interview with 25 entrepreneurs and on a cooperation with 15 local e-commerce enterprises. All experts paid high attention to the dislocation of supply and demand for e-commerce talents in China. They gave evidence on a fact that less than 10% of e-commerce graduates in China did not meet their requirement, 40% of the graduates needed on-job training for 2-3 months, and the remainders needed such training for 5-6 months. The experts considered that the best way for solving the present structural conflict of supply and demand for e-commerce talents in China is government support, enterprise participation and university adjudging its cultivation mode. At a local meeting, the research was shown. Its proposals focused on building social linkage to solve the structural conflict of supply and demand for e-commerce graduates. Through warm discussion, the attendees agreed to the proposal. An attended official gave her high appreciation on the authors' proposal. At present, the research is in a continuous cooperation with a local e-commerce enterprise about practice of e-commerce operation and maintenance. 100 undergraduates are participated in the practice.

##### **5. CORRECTION TO THE DISLOCATION FOR ELECTRONIC COMMERCE TALENT SUPPLY AND DEMAND BASED ON THE INTERACTION OF THE SOCIAL VARIOUS PARTIES**

Reference and data cited in this paper show that quantity to demand electronic commerce talents is big, and universities cultivate the substantial e-commerce students every year. However, such an embarrassing situation occurs in the current society. The demanders (enterprises) think that the e-commerce talent is in short supply on market, but the suppliers (college and university) think that the supply always exceeds the demand. Contradiction between e-commerce talent supply and demand is mainly manifested on the mismatch between supply and demand. A large number of e-commerce graduates of colleges and universities cannot meet the requirement of the industry, cannot be identified by the society or corporate, and so miss job opportunities. In order to correct the dislocation of supply and demand, the interaction of the whole social parties and their collaborative effort are needed.

Firstly, the government plays a leading role. As a new growth mode of urban development, the electronic commerce brings to the attention of the local governments. In recent years, the increment of regional employment is increased by job increase related to the electronic commerce. Promoting entrepreneurship plan for the e-commerce talents and employment (entrepreneurship) auxiliary program for the e-commerce graduates will have a profound effect on a city's economic development. A lot of cities seize the opportunity to build up e-commerce demonstration city. Local commercial departments have worked out the relevant detailed rules for implementing the plan. However, most of the rules focus only on the cultivation and development of e-commerce market and have not emphasized on the cooperation with universities in the entrepreneurship guidance for talent training and selecting. Measures for implementation are not in place.

The local administrations should guide the social training institutions to participate in employment (entrepreneurship) auxiliary program for the e-commerce graduates, and take the appropriate measures to absorb and encourage a private capital to invest in e-commerce talents training and continuing education; Activation of the capital makes students afford to the e-commerce professional training and so the students are able to participate in the pre-service technical training. The operation mode for the training institutions should be got to innovation. Taxing management to the training institutions should be relaxed, so as to guarantee the efficiency and effectiveness of the capital operation. This is the basic ways to solve the current supply and demand dislocation for e-commerce talents, and the fundamental guarantee to maintain sustainable development power of the social training institutions.

Secondly, enterprises are primary roles. The enterprises should participate in solving the problem of electronic commerce talent supply from the campus stage. Companies should involve in the construction and modification of professional training program for the universities. Through setting up practical base in university campus, the enterprise and university together make decision and implement the employment (entrepreneurship) auxiliary program participated by the students. By commissioning tasks to the participating students, enterprises set up plans, arrange schedules, and teach students to learn and experience in practice. Enterprises should

also encourage the engineers into the campus to give their open seminar, so as to share all kinds of actual combat experience with students. At the same time in the completion of the entrusted task, the students gradually master the e-commerce skills. 'Learning in practicing' has either held of interest of the students or can improve the efficiency and effectiveness of learning.

Through the employment (entrepreneurship) auxiliary program, the enterprise can choose and employ the students according to its goals, purposefully take the campus recruitment and training tasks, and finally reduce the cost of hiring and earlier stage risk.

Enterprises should select and hire the e-commerce talents by strategic vision and have to bear the historical responsibility of training the talents. The enterprises should relax the requirement of employment to the graduates, weigh the input-output ratio from two aspects of social and economic benefits, and lower expectations to ability and performance of the graduates. Furthermore, the enterprises should provide the talents with space to give play to ability, let boldly them get jobs and tasks, in order to accept the challenge in their work, and make them play a better potential.

Thirdly, universities should actively respond to changes and needs of the market. The e-commerce is characterized by the discipline overlapping, technology integration and management efficiency. The e-commerce personnel should not only have certain business skills, but also have social qualities such as innovative thinking, interpersonal communication, coordination ability and predicting the future. By cultivating the e-commerce talents, universities should follow up the change and development of the market, adapt to the demand of the society. By winning the support of the department in charge of the education, the universities should actively cooperate with the enterprises, jointly promote the employment (entrepreneurship) auxiliary program for the e-commerce graduates, and provide the enterprises into the campus with convenient conditions. Through implementing a sustainable plan, the universities should also let the students take part in the program with academic adjustments.

Universities should take responsibility of popularizing and promoting an application for the electronic commerce technology. Electronic commerce cannot be limited in a category of one



specialty. In fact, any industry will need the e-commerce. Universities should take measures to cultivate students' ability of electronic commerce and to popularize the awareness of e-commerce to all students in the universities. It is very necessary to popularize basic skills and knowledge of electronic commerce to all students in colleges and universities. The generalized e-commerce talents are able to meet the demand from all walks of life.

Finally, family should support the students to large degree. Expanding and deepening of e-commerce in a various fields and industries bring a large number of employment opportunities for the e-commerce talents. Self-employment opportunities of electronic commerce, due to the lower threshold and a variety of types, are not restricted by time and place. In the process of the formation of students' employment consciousness and employment choice, the family should give moderate effect and guide on own children. The employment (entrepreneurship) auxiliary program executed in the campus must get parents' understanding and supporting. To cultivate students with appropriate risk awareness, to provide them with appropriate funding, and to understand their time expense is the biggest support of parents to students in career planning of e-commerce.

At the same time, the students should also keep pace with The Times' development in changing employment awareness. They should deeply understand and grasp the position and role of e-commerce in the future economic development, and understand their own professional direction and development opportunities. The combination of the book knowledge taught at universities with the actual combat skills trained in enterprises is able to strengthen comprehensive professional knowledge and master the practical operation skills.

With the development of the discipline, the e-commerce major is more and more strongly characterized by technological practicality. E-commerce professional courses are mastered by self-study with low difficulty. Teaching in practice is easier than studying in a class. By 'learning in practicing', the knowledge can be systematically and firmly grasped and flexibly applied. Through the interaction of the social various parties, to carry out the employment (entrepreneurship) auxiliary program for the e-commerce graduates will solve the supply and demand dislocation for the e-commerce talents, improve their working

ability and performance and promote the development of e-commerce and social economy.

## 6. CONCLUSION

As the electronic commerce penetrates deeply to the various industries, more and more employment opportunities for the e-commerce occurs in the society. Due to the lack of the e-commerce talents on the market, resupplying is constantly needed by the e-commerce graduates of colleges and universities. However, the employment rate of the e-commerce graduates is currently lower than the average level for other majors. It reflects the supply and demand dislocation for the e-commerce talents. Correction of the supply and demand dislocation needs the interaction and collaborative efforts of all the parties in the whole society.

As mentioned in this paper, the electronic commerce is characterized by the strong technological practicality. The author suggests that the social parties be united to implement the employment (entrepreneurship) auxiliary program for e-commerce graduates. By commissioning tasks to the participating students, enterprises set up plans, arrange schedules, and teach students to learn and experience in practice. At the same time in the completion of the entrusted task, the students gradually master the e-commerce skills. 'Learning in practicing' can either held of interest of the students or improve the efficiency and effectiveness for the learning.

Through the interaction of the social various parties, to carry out the employment (entrepreneurship) auxiliary program for the e-commerce graduates will solve the supply and demand dislocation for e-commerce talents, improve their working ability and performance and promote the development of e-commerce and social economy.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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