E-COMMERCE IN CHINA (2015)

China International Electronic Commerce Center

Introduction

This book is a comprehensive research report written as organized by China International Electronic Commerce Center to reflect the development status of e-commerce in China From different perspectives, this report reflects the latest development of e-commerce in China and describes the development characteristics, development trend and policy orientation of e-commerce in China. Its main contents include the general situation of e-commerce development in China in 2015, electronic commerce development environment, development situation of e-commerce services, development situation of industrial e-commerce, development situation of agriculture-related e-commerce, development situation of e-commerce, current development situation of e-commerce entrepreneurship and employment, and development situations of e-commerce in the provinces, cities and autonomous regions. The appendices to this book provide the development situation of global e-commerce, compilation of e-commerce policies and regulations promulgated in 2015, e-commerce development events in China in 2015, and the demonstration list of e-commerce in China in 2015.

This book, relying on extensive source of information, contains complete, accurate and reliable contents, has high literature value and practical value, and can be used for reference by governments at all levels and industrial associations for promotion of application of e-commerce and promotion of application of e-commerce by enterprises, or by research and teaching institutions for research of e-commerce.

2015 Report on E-commerce in China ZHONGGUO DIANZI SHANGWU BAOGAO 2015

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Preface

2015 is the final year of the 12th five-year plan. When the past five years are reviewed, it can be found out that the e-commerce in China grew at annual average growth of more than 35% to RMB20.8 trillion in 2015, and the strategic development goal of "double gross merchandise volume of e-commerce" has been successfully achieved.

In 2015, the online retail in China, undergoing the "quality upgrading", had the gross retail sales of RMB3.88 trillion, representing a year-on-year growth of 33.3%. The e-retailing of physical commodities accounted for 10.8% of total retail of social consumer goods, thus the e-retailing market remained top 1 in the world; the gross merchandized volume of cross-border e-commerce grew 21.7% year on year to RMB4.56 trillion, to the contrary to the trend, making the cross-border e-commerce an important channel of import and export trade for China; the e-commerce purchase and sales of industrial enterprises was improved to 37.24%, or even 60% in certain sectors; and the rural e-commerce developed at a fast speed, with construction of 250,000 e-commerce village service points, addition of 1.18 million online stores, year-on-year growth of e-commerce trading volume of 96% to RMB353 billion and e-retailing of rural products of RMB150.5 billion. This data show that the remarkable tremendous achievement was made in e-commerce in China, which has vast potential for future development.

In 2015, a series of policies on supporting the e-commerce development, such as the Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force of the State Council, and the Opinions on Promoting the Online and Offline Interactions for Accelerating the Business Circulation and Innovative development of Transformation and Upgrading of the General Office of the State Council, have been introduced. Government departments at all levels shall, in accordance with the principle of "active promotion, gradually standardization, strengthening of guidance", continue to give more support for the e-commerce, perfect the electronic pay, logistics, express and other new business infrastructure, for active promoting and guiding the development of e-commerce service. The construction of national e-commerce demonstration cities, national demonstration base of e-commerce, e-commerce demonstration enterprises and other e-commerce demonstration of pilot cross-border e-commerce cities, comprehensive pilot areas of cross-border e-commerce, comprehensive rural demonstration counties of e-commerce, pilot synergy of e-commerce and logistics delivery, poverty alleviation via e-commerce and others.

E-commerce is becoming an important driving force for achievement of "innovative, coordinated, green, open and shared" development of Chinese economy and society, the pioneer industry of "Internet+" action plan" and the land for public entrepreneurship and innovation. In the situation of in-depth adjustment to and difficult recovery of global economy, weak growth of international trade, and great pressure from downward economy in China, we should give a full play to the advantages of e-commerce, further improve the efficiency of social resource allocation, facilitate the supply-side structural reform and development of new economy, to make the public feel the common benefits, convenience, fastness and safety of e-commerce and to further promote the achievement of ambitious development goal of construction of a well-off society.

The Report on Chinese Electronic Commerce is a comprehensive report written as organized by Chinese international electronic commerce center to reflect the annual development of e-commerce in China, and show the readers a full and objective picture of development of e-commerce in China in the past year, through the analysis and clear-up of main data, features, trend and major areas of e-commerce in China. We welcome readers to point out and make comments on any error and defect in this book arising from insufficient time and limited knowledge of the writers.

Zhu Xiaoliang Director of China International Electronic Commerce Center April 30, 2016

Chapter 1 General Report on the Development of E-commerce in China (2015)

Year 2015 saw the sustained and rapid development of E-commerce in China. Significant changes have taken place in the depth, breadth, trading scale and manner of the application of E-commerce. This report summarizes the major progress and development characteristics of E-commerce in China in 2015 and prospects the trends of E-commerce in China in the next stage.

1.1 Major progress of E-commerce in China

1. Further popularization of e-commerce application

By the end of 2015, there have been 688 million netizens in China, with the internet penetration rate of 50.3%⁽ⁱ⁾. Meanwhile, commercial trade applications maintain steady growth. Table 1-1 reflects the rate of utilization of e-commerce network applications by Chinese netizens in 2015.

Application	User scale ('0,000)	Rate of utilization of netizens (%)	Annual growth rate (%)
Online payment	41618	60.5	36.8
Online shopping	41325	60.0	14.3
Online banking	33639	48.9	19.2
Travel booking	25955	37.7	17.1
Group purchase	18022	26.2	4.4
Internet financing	9026	13.1	15.0
Online education	11014	16.0	
Internet medical	15211	22.1	

 Table 1-1
 Rate of Utilization of E-commerce Network Applications in China in 2015

Source: China Internet Network Information Center

Table 1-1 shows the major changes in the number of persons utilizing E-commerce network applications. Among them, the network shopping market maintained rapid development. As at December 2015, there have been 413 million online shopping users, increasing by 51.83 million (14.3%) compared with those at the end of 2014. Table 1-1 reflects a steady growth year by year in Chinese online shopping users from 2011 to 2015. With a significant increase in the number of mobile online shopping users, the users totaled 340 million, increasing by 43.9%. The rate of utilization of mobile online shopping increased from 42.4% to 54.8%.

⁽¹⁾ China Internet Network Information Center. The 37th Statistic Report on Development of Internet Network in China [R/OL] (January 22, 2016) [April 23, 2016].

http://cnnic.cn/gywm/xwzx/rdxw/2015/201601/t20160122_53283.htm.



Chart 1-1 Steady Growth Year by Year in Chinese Online Shopping Users from 2011 to 2015

Source: China Internet Network Information Center

2. Gross merchandise volume (GMV) of e-commerce over RMB 20 trillion

Based on a guess and estimate made by the Authoring Group of the Report on E-commerce in China, in 2015, the GMV of e-commerce in China was RMB 20.8 trillion[®], with a year-on-year growth of about 27%[®], which overfulfilled the development target[®] proposed in the Twelfth Five-Year Plan for the Development of E-commerce and quadrupled the GMV of e-commerce. E-commerce has driven the development of national economy. Chart 1-2 reflects a strong and sustainable growth in the GMV of e-commerce in China since 2004.



⁽⁰⁾ Without special instructions herein, statistical data is denominated in RMB (hereinafter the same).

⁽²⁾ Based on the GMV of national e-commerce in 2014 of RMB 16.39 trillion promulgated by the National Bureau of Statistics, the data is appropriately modified with the adding method, the natural growth method, the ratio method and the provincial (municipal) data aggregation method.

⁽³⁾ Ministry of Industry and Information Technology. The Twelfth Five-Year Plan for the Development of E-commerce [EB/OLJ (March 27, 2012) [February 23, 2016].

http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/14527814.html.

From the point of regional distribution, the fastest-growing regions are still coastal provinces and neighbors, including Zhejiang, Liaoning, Guangxi, Hunan, Jiangxi, etc. with the average annual growth rate of over 50%; they are followed by central and western regions and northeast regions (including Jilin, Hebei, Shandong, Shaanxi, Hubei, Sichuan, Guizhou, Inner Mongolia, Gansu, Qinghai and Xinjiang etc.) with the average annual growth rate of over 30%; and the average annual growth rate of Beijing, Shanghai and Guangdong of over 20%. Table 1-2 reflects the growth rate of the GMV of e-commerce in all provinces, autonomous regions and municipalities directly under the Central Government.

Average annual growth rate	Province
Over 50%	Zhejiang, Liaoning, Guangxi, Hunan and Jiangxi
Over 30%	Jilin, Hebei, Shandong, Shaanxi, Hubei, Sichuan, Guizhou, Inner Mongolia, Gansu, Qinghai and Xinjiang
Over 20%	Beijing, Shanghai and Guangdong
Others	Tianjin, Shanxi, Henan, Jiangsu, Anhui, Fujian, Hainan, Yunnan, Ningxia and Tibet

Table 1-2	Growth in the GMV of E-commerce in China by District
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3. Online retail sales remaining a rapid growth of more than 30%

With the growth of online shopping users, in 2015, the GMV of online retail in China reached RMB 3.8773 trillion with a year-on-year growth of 33.3%. Among them, online retail sales of physical commodities were RMB 3.2424 trillion with an year-on-year growth of 31.6%, 20.9% higher than the growth rate of total retail sales of consumer goods in the corresponding period and accounting for 10.8% of total retail sales of consumer goods (RMB 30.0931 trillion); online retail sales of non-physical commodities were RMB 634.9 billion with an year-on-year growth of 42.4%[®]. Chart 1-3 reflects a rapid expansion of online retail market in China from 2008 to 2015.



Chart 1-3 Growth in the GMV of Online Retail Market in China from 2008 to 2015

⁽¹⁾ National Bureau of Statistics. Statistical Bulletin on National Economy and Social Development in 2015 [EB/OL] (February 29, 2016) [March 27, 2016].

http://www.stats.gov.cn/tjsj/zxfb/201602/t20160229_1323991.html.

In the online retail market in China in 2015, the GMV of mobile shopping market was RMB 2.12 trillion with an annual growth rate of 136.7%, accounting for 55% of the GMV of online retail and increasing by 8.7% compared with that of 2014, which was much higher than the overall growth rate of retail sales of online market in China. Mobile e-commerce is no longer only limited to online shopping. It is also widely used in the field of tourism, catering and leasing. Chart 1-4 reflects a rapid expansion of mobile shopping market in China from 2010 to 2015.



Chart 1-4 Growth in the GMV of Mobile E-commerce Market in China from 2010 to 2015

Source: a comprehensive analysis on the statistical data provided by iResearch and Analysys

4. GMV of cross-border e-commerce reaching RMB 4.56 trillion

In 2015, gross value of imports and exports of goods in China reached RMB 24.59 trillion, with a yearon-year fall of 7%[®]. Among them, the value of exports was RMB 14.14 trillion, decreasing by 1.8%; and that of imports was RMB 10.45 trillion, decreasing by 13.2%. Facing such an external climate as a shrinking international market and increasing pressure of import and export, cross-border e-commerce in China presents greater potentials for vigorous development. Based on a guess and estimate, the GMV of cross-border e-commerce in 2015 was about RMB 4.56 trillion in 2015 with a year-on-year growth of 21.7%, among which, the value of exports was about RMB 3.99 trillion with a year-on-year growth 21.9%; that of imports was about RMB 573.1 billion with a year-on-year growth 20.3%[®]. Chart 1-5 reflects the accelerated development of cross-border e-commerce market in China from 2010 to 2015.

⁽¹⁾ General Administration of Customs. Gross value of imports and exports in China in 2015 was RMB 24.59 trillion [R/OL] [January 13, 2016] [January 23, 2016]. http://www.customs.gov.cn/publish/portal0/tab65602/info784205.htm.

According to the data monitored by Analysys, the measurement methods are divided into two kinds: i. the manufacturer ratio measurement method; measured according to the market shares by collecting the data of such major companies as ebay, amazon, AliExpress and LightInTheBox; ii. parcel measurement method; calculated in proportion according to the data on delivery of oversea location, the quantity of EMS delivery and the data on delivery of other express companies or other channels. According to the data measured with the above two methods, the relevant data on the cross-border e-commerce will be obtained after the consideration of the proportion of the value of cross-border e-commerce in total imports and exports of China.



Chart 1-5 Growth in the GMV of Cross-border E-commerce in China from 2008 to 2015

Source: Analysys International

5. Enterprise e-commerce extended

Driven by the development of online retail market in China, the number of companies which develop online sales and the sales volume continued to grow. As at December 2015, there have been 32.6% of enterprises that carried out online sales in China, with an increase compared with those in the past 4 years (see Chart 1-6).





Source: China Internet Network Information Center

In 2015, the Central Economic Working Conference proposed five economic tasks including "addressing overcapacity, reducing inventory, deleveraging, lowering costs, and bolstering areas of weakness", thus reversing the decline in B2B online purchasing, which was back on track of a rising trend. As a result, Chinese enterprises that carried out online procurement accounted for 31.5% (see Chart 1-7).

Internet marketing is an important part of the enterprise e-commerce application. In 2015, the proportion of enterprises that develop internet marketing increased by 9.6% compared with that of 2014. Chart 1-8 mirrors the proportion of enterprises that carried out internet marketing from 2011 to 2015.







Chart 1-8 Proportion of Enterprises That Carried out Internet Marketing from 2011 to 2015

Source: China Internet Network Information Center

6. Amount of the third-party internet payment reaching RMB 11.86 trillion

The third-party internet payment is an important support of e-commerce. In 2015, the amount of the third-party Internet payment reached RMB 11.86745 trillion with a slowing year-on-year growth of $46.9\%^{\circ}$. Chart 1-9 reflects a rapid expansion of the third-party internet payment in China from 2009 to 2015.



Chart 1-9 Growth in the GMV of the Third-party Internet Payment in China from 2009 to 2015

Source: iResearch

⁽¹⁾ iResearch: Amount of the third-party internet payment in 2015 reached RMB 11.8 trillion [EB/OL] [March 17, 2016] [March 23, 2016]. http://report.iresearch.cn/content/2016/03/259313.shtml.

7. Volume of annual express delivery exceeding the benchmark of 20 billion pieces

In 2015, the volume of annual express delivery of China exceeded 20 billion pieces for the first time and consistently ranked the first place in the world. Express delivery, working together with e-commerce, supports the development of e-commerce.

In 2015, Chinese express delivery enterprises accumulatively delivered 20.67 billion pieces with a yearon-year growth of 48%; the accumulative business income was RMB 276.96 billion with a year-on-year growth of 35.4%. Among it, the accumulative business income from delivery in the same city was RMB 40.08 billion with a year-on-year growth of 50.7%; that across different cities RMB 151.29 billion with a year-on-year growth of 33.8%; and that from international services and that from the delivery in Hong Kong, Macau and Taiwan RMB 36.96 billion with a year-on-year growth of 17%^(III). Chart 1-10 mirrors an accelerated increase in the volume of business of Chinese express delivery enterprises from 2008 to 2015.



Chart 1-10 Increase in the Volume of Business of Chinese Express Delivery Enterprises from 2010 to 2015 Source: State Post Bureau

Source: State Post Bureau

1.2 Policies and measures made by government departments to promote the development of e-commerce

1. Intensively promulgate policies to vigorously promote the development of e-commerce

In 2015, as an emerging industry and a new business pattern, e-commerce was highly value by the State Council and the relevant departments.

On March 5, 2015, at the Third Session of the Twelfth National People's Congress, Li Keqiang, the Premier the State Council, emphasized the development of e-commerce for three times in the Report on the Work of the Government[®] which (i) fully affirmed the promotion of rapid growth of e-commerce in 2014, logistics, express and other emerging industries in industrial structure adjustment; (ii) required to expand comprehensive trials in cross-border e-commerce to facilitate the transformation and upgrading of foreign trade; and (iii) to develop the "Internet Plus" action plan to encourage the healthy development of e-commerce, industrial networks, and internet banking, and to guide internet-based companies to increase their presence in the international market.

According to the spirit of the Report on the Work of the Government in 2015, the State Council and all of its affiliates made efforts to promote the rapid development of e-commerce on the basis of the principle of active promotion, gradual standardization and strengthened guidance.

http://www.spb.gov.cn/dtxx_15079/201601/t20160114_710673.html.

⁽¹⁾ State Post Bureau. The State Post Bureau published the operation of the postal industry in 2015 [EB/OL] [January 14, 2016] [March 27, 2016].

[®] Li Keqiang. The Report on the Work of the Government (2015) [EB/OL] [March 5, 2015] [March 16, 2016] http://www.gov.cn/guowuyuan/2015-03/16/content_2835101.htm

The State Council has successively issued several documents including the Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®], the Guiding Opinions on Promoting the Healthy and Rapid Development of Cross-border E-commerce[®], the Opinions on Promoting Online and Offline Interaction to Accelerate the Innovative Development, Transformation and Upgrading of Commerce Circulation[®], the Guiding Opinions on the Promotion of the Development of Rural E-commerce[®] and the Opinions on Several Policy Measures for Vigorously Promoting Public Entrepreneurship and Innovation[®]. These documents not only clarify the strategic orientation for the development of e-commerce, but also put forward specific policies and measures from such aspects as cross-border trade, commerce circulation, rural area, innovation and entrepreneurship.

In May 2015, to implement the actions and arrangements of the State Council, accelerate in-depth integration of internet and circulation industry, drive the transformation and upgrading of circulation industry, enhance circulation efficiency, create new economic growth points, innovate the ways for serving the people's livelihood and release the consumption potential, the Ministry of Commerce formulated the Action Plan for "Internet Plus Circulation"[®], which, based on the present situation of the application of internet technology in the circulation field of China, clarified such working train of thought, overall objectives, major tasks and main measures as taking internet as the carrier and promoting the construction of a modern circulation system, which is of great significance to guide the production, promote the circulation, expand the consumption, absorb employment and improve the people's livelihood. The Action Plan put forward five recent working goals:

i. to create and cultivate 200 comprehensive demonstration counties for application of e-commerce in rural areas, whose average growth in the GMV of e-commerce shall not less than 30% on the existing basis:

ii. to create 60 national-level e-commerce demonstration bases, cultivate 150 national-level ecommerce demonstration enterprises, build 50 typical enterprises facing transformation from traditional circulation and service enterprises and cultivate 100 network service brands;

iii. to operate market-based mechanism to promote the construction of 100 overseas e-commerce warehouses;

iv. to guide local regions to build 50 e-commerce training bases for e-commerce knowledge and skills training for 500,000 persons;

V. to strive to have made the GMV of e-commerce in China reach RMB 22 trillion and that of online retail RMB 5.5 trillion by the end of 2016.

The Ministry of Agriculture plays the important role of agricultural e-commerce in cultivating new economic driving force, building "twin engines" and realizing "dual objectives", actively foster market entities of agricultural e-commerce, focus on perfecting the online and offline public service system of agricultural e-commerce, strive to unclog agricultural e-commerce channels, intensify agricultural ecommerce application of technical innovation and improve agricultural e-commerce policy system; actively explore such new model of agricultural e-commerce as direct distribution of fresh agricultural products "ten urban communities in bases" and "secure agricultural materials for peasants" and strive to break through bottleneck and barriers faced by the agricultural e-commerce at present.

State Council. Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL]. (May 7, 2015) [January 26, 2016]. http://www.gov.cn/zhengce/content/2015-05/07/content_9707.htm.

General Office of the State Council. Guiding Opinions of the General Office of the State Council on Promoting the Healthy and Rapid Development of Cross-border E-commerce [EB/OL] (June 20, 2015) [January 26, 2016].

http://www.gov.cn/xinwen/2015-06/20/content_2882205.htm.

General Office of the State Council. Opinions of the General Office of the State Council on Promoting Online and Offline Interaction to Accelerate the Innovative Development, Transformation and Upgrading of Commerce Circulation [EB/OL] (September 18, 2015) [February 26, 2016]. http://www.gov.cn/zhengce/content/2015-09/29/content_10204.htm.

General Office of the State Council. Guiding Opinions of the General Office of the State Council on the Promotion of the Development of Rural E-commerce [EB/OL] (November 9, 2015) [January 26, 2016]. http://www.gov.cn/zhengce/content/2015-11/09/content_10279.htm. [©] State Council. Opinions of the State Council on Several Policy Measures for Vigorously Promoting Public Entrepreneurship and Innovation

[[]EB/OL] (June 11, 2015) [February 26, 2016].

http://www.mofcom.gov.cn/article/b/g/201507/20150701062949.shtml.

Ministry of Commerce. Circular of the General Office of the Ministry of Commerce on Issuing the Action Plan for "Internet Plus Circulation" [EB/OL] (May 16, 2015) [January 23, 2016]. http://www.gov.cn/xinwen/2015-05/16/content_2863204.htm.

2. Strengthen the construction of e-commerce development environment

I. Accelerate the construction of the e-commerce legal system. In December 2013, the National People's Congress initiated the legislation of the E-commerce Law of the People's Republic of China. In the legislation, the National People's Congress adopted a new method of legislation: firstly, it divided core issues on e-commerce into 12 sub-topics and commissioned national ministries and the relevant provincial departments to conduct monographic studies from two different aspects; secondly, in October 2014, it commissioned six research groups to draft the outline of e-commerce legislation to absorb the legislative ideas of different departments; thirdly, in April 2015, it formed two legislative text drafting groups in Beijing and local regions to put forward the draft legislation; and fourthly, in November 2015, it drafted the E-commerce Law of the People's Republic of China and started to seek comments. In addition, the Food Safety Law of the People's Republic of China passed in April 2015 specified that: "Providers of third-party platforms for online food trading shall conduct the real-name registration for the online food traders and define the food traders' food safety management responsibilities; for the food traders that shall obtain licenses in accordance with the law, the said providers shall also review the licenses"; "upon the discovery of any activity of the online food traders in violation of the provisions herein, providers of third-party platforms for online food trading shall stop the activity in a timely manner and immediately report the same to the food and drug administrations of the people's government at the county level at the places where they are located; in case of any serious illegal behavior, the said providers shall immediately stop the provision of online trading platform services."

For the outstanding problems in e-commerce transactions, the Ministry of Commerce accelerated the construction of regulations on e-commerce and the relevant standards. It promulgated the Provisions on the Procedures for Formulating Transaction Rules of Third-party Platforms for Internet Retail in December 2014; and it promulgated the online retail third-party platform trading rules formulated procedures provisions; the Specifications for E-commerce Logistics Services (SB/T11132-2015), the Technical Requirements for Settlement of Claims regarding E-commerce Goods (SB/T11133-2015), the General Technical Conditions for Marked Price of E-commerce Goods (SB/T11134-2015), the Specifications for Identification of E-commerce Enterprises (SB/T1112-2015), the Specifications for E-commerce Information Inquiry Services Provided by a Third Party in Trade Financing (SB/T11132-2015) and other standards and specifications^{®®}.

II. Further standardize the market order. On October 26, 2015, the general office of the State Council promulgated the Opinions on Strengthening the Governance of Infringement and Counterfeiting on the Internet. For rampant criminal acts such as intellectual property infringement and manufacturing and selling counterfeit and shoddy goods on the internet, it arranged such three key regulatory measures as cracking down on online transactions in counterfeit and shoddy goods, fighting online infringements and piracy and improving regulatory information service quality to strive to crack down on infringing and counterfeiting acts on the internet, improve the online transaction environment and promote the healthy development of e-commerce[®]. Since the special governance actions of infringement and counterfeiting on the internet in 2014, more than 11,000 cases on infringement and counterfeiting had been investigated and more than 3,400 sites had been shut down or shielded.

In 2015, the Ministry of Commerce formulated the Working Points on Cracking down Infringing and Counterfeiting Nationwide in 2015, basically completed the construction of the central information sharing platform for the connection of administrative enforcement and criminal justice and the information sharing platform for 26 provinces, established the "national database of infringing and counterfeit items" and the "national public service platform for anti-counterfeiting traceability and verification of products", promoted the information disclosure of administrative penalties on infringing and counterfeit and established the system of monthly statistics reports on information disclosure and

[®] Standing Committee of the National People's Congress. Food Safety Law of the People's Republic of China [EB/OL] (April 25, 2015) [March 26, 2016].

http://www.gov.cn/zhengce/2015-04/25/content_2853643.htm.

[®] Ministry of Commerce. Announcement of the Ministry of Commerce of the People's Republic of China [2015] No.58 published the number, name and date of implementation of 23 industrial standards for domestic trade

[[]EB/OL] (November 9, 2015) [January 26, 2016]. http://www.mofcom.gov.cn/article/b/g/201601/20160101232190.shtml.

[®] Ministry of Commerce. Announcement of the Ministry of Commerce on Approving 20 Industrial Standards for Domestic Trade including the Terms of Media Shopping (Announcement of the Ministry of Commerce [2015] No.1) [EB/OL] (January 6, 2015) [January 26, 2016]. http://www.mofcom.gov.cn/article/b/c/201501/20150100863682.shtml.

^(e) General Office of the State Council. Opinions of the General Office of the State Council on Strengthening the Governance of Infringement and Counterfeiting on the Internet [EB/OL] (October 26, 2015) [January 26, 2016].

http://www.mofcom.gov.cn/article/b/g/201601/20160101229949.shtml.

random inspection. By the end of 2015, 27 provinces (autonomous regions and municipalities directly under the Central Government) and the Xinjiang Production and Construction Corps had established the platforms connecting administrative enforcement and criminal justice, in which those in 21 provinces realized the connection with the central platform and entered the information of over 100,000 cases.

From the end of 2014 to late November in 2015, all administrative law enforcement departments disclosed nearly 30,000 administrative punishment cases in total, accounting for about 30% of all administrative punishment cases, about 10% higher than those at the end of 2014, which preliminarily achieved the goal for standardizing law enforcement of departments, intensifying punishments for illegal acts, protecting rights and interests of consumers and promoting the construction of the rule of law to do business.

The State Administration for Industry and Commerce insisted on innovation and specification and introduced the Interim Administrative Provisions on the Online Mass Promotion of Goods and Services, the Opinions on Strengthening the Supervision and Administration of Online Market and other policies and measures; it also drove the in-depth integration of technical means and regulation and preliminarily built the "national regulatory service system for the online trading platform". 29 provincial online regulatory platforms had been built in China and the construction of prefecture-level online regulatory platforms were being accelerated, which effectively improved the directional monitoring level of online trading commodities. In the 2015 special action Red Shield, the State Administration for Industry and Commerce cracked down on illegal acts of online infringement and counterfeiting. As a result, 12,600 sites were ordered to be corrected, 6,737 illegal cases were investigated and penalties of RMB 123 million were fined.

In order to better display the functional role of inspection and quarantine and promote the development of cross-border e-commerce, the General Administration of Quality Supervision, Inspection and Quarantine proposed six specific measures to improve the regulation, including establishing the work system and mechanism for inspection and quarantine conforming to the development of cross-border e-commerce, establishing the cross-border e-commerce list management system, building risk monitoring and quality traceability systems for cross-border e-commerce, innovating the inspection and quarantine supervision mode for cross-border e-commerce, implementing filing management of cross-border e-commerce and strengthening the information construction of cross-border e-commerce[®] In addition, the General Administration of Quality Supervision, [®] Inspection and Quarantine established a collaborative network for cracking down on counterfeit e-commerce goods and safeguarding legal rights, which aims to build a platform where the society may actively involve in enforcing laws and cracking down on counterfeit goods, to crack down on illegal acts of online infringement and counterfeiting, enhance the quality of e-commerce products, maintain the legitimate rights and interests of consumers, manufacturing enterprises of famous and quality products and e-commerce platform enterprises and serve the healthy development of e-commerce.

III. Raise the level of trade facilitation. The General Administration of Customs further promoted the reform of paperless customs clearance and decided to expand the trials in automatic paperless customs clearance for import license on the basis of pilot reform in the China (Shanghai) Pilot Free Trade Zone in the early stage. Pilot customs were extended from the China (Shanghai) Pilot Free Trade Zone to ten customs within such three new free trade zones as the China (Tianjin) Pilot Free Trade Zone, the China (Fujian) Pilot Free Trade Zone and the China (Guangdong) Pilot Free Trade Zone, as well as two national-level innovation demonstration zones for import trade in Ningbo and Suzhou, namely Tianjin, Shanghai, Nanjing, Ningbo, Fuzhou, Xiamen, Guangzhou, Shenzhen, Gongbei and Huangpu Customs respectively.

3. Expand pilot e-commerce

^o General Administration of Quality Supervision, Inspection and Quarantine. Opinions of the General Administration of Quality Supervision, Inspection and Quarantine on Better Performing the Functional Role of Inspection and Quarantine to Promote the Development of Cross-border E-commerce [EB/OL] (July 15, 2015) [February 26, 2016].

http://www.mofcom.gov.cn/article/b/g/201507/20150701046071.shtml.

[®] China Industry & Commerce News. Establishment of the National Collaborative Network for Cracking down on Counterfeit E-commerce Goods and Safeguarding Legal Rights [EB/OL] (December 17, 2015) [January 26, 2016]. http://www.saic.gov.cn/ywdt/gsyw/sjgz/xxzx_1/201512/t20151217_165046.html.

In 2015, there had been 10 pilot cities for e-commerce imports determined by the State Council, including Shanghai, Chongqing, Hangzhou, Ningbo, Zhengzhou, Guangzhou, Shenzhen, Tianjin, Fuzhou and Pingtan. In March 2015, the State Council again approved the establishment of the China (Hangzhou) Cross-border E-commerce Comprehensive Pilot Area. In August 2015, the Ministry of Commerce promulgated the Opinions on Supporting the Innovative Development in Pilot Free Trade Zones[®] to support the development of cross-border e-commerce in the PFTZs; meanwhile, on the basis of summary and estimate of pilot situation of the China (Hangzhou) Cross-border E-commerce Comprehensive Pilot Area, it actively and steadily expanded the comprehensive trials in cross-border e-commerce nationwide, and preferentially popularized the policies for customs supervision, inspection and quarantine, import and export tax and foreign exchange settlement and sale to the PFTZs to promote the healthy and rapid development of cross-border e-commerce.

⁽⁰⁾ Ministry of Commerce. Opinions of the Ministry of Commerce on Supporting the Innovative Development in Pilot Free Trade Zones [EB/OL]. (August 25, 2015) [January 26, 2016]. http://www.mofcom.gov.cn/article/b/g/201510/20151001144424.shtml.

Meanwhile, the Ministry of Commerce also selected a batch of import and export cities with good basic conditions and large scale of e-commerce in the eastern and middle western regions to set up comprehensive pilot areas for cross-border e-commerce, duplicate and popularize the relevant policy systems and management systems preliminarily explored from the China (Hangzhou) Cross-border E-commerce Comprehensive Pilot Area; strived to promote the construction of six cross-border e-commerce systems, including information sharing system, online financial service system, intelligent logistics system, e-commerce credit system, as well as statistical monitoring system and risk prevention and control system; built such two platforms as online "single window" and offline "comprehensive parks" to realize information exchange, mutual recognition of regulation, mutual assistance in law enforcement, convergence of logistics, finance and other supporting facilities and services among government departments and to build a complete industry chain and ecosystem for cross-border e-commerce.

To encourage and support the development of rural e-commerce, the Ministry of Commerce actively promoted the commercial information services in rural areas, established and improved the standards and specifications for e-commerce of agricultural products and the logistics distribution system, organized rural e-commerce innovation competitions and the rural e-commerce talents program. Since 2014, the Ministry of Commerce in concert with the Ministry of Finance arranged central funds of RMB 4.8 billion to support the development of rural e-commerce in 256 demonstration counties (56) rural electronic commerce (56 counties in 2014 and 200 ones in 2015), especially in the central and western regions. Among them, there were 103 key counties that are supported by the State and centralized contiguous destitute counties. Through financial support, they promoted rural areas, especially the key counties that are supported by the State and centralized contiguous destitute counties, to form a haematogenous mechanism to drive the formation of a virtuous circle for e-commerce and income growth of the peasants.

In 2015, the Ministry of Commerce continued to carry out the construction of demonstration bases and demonstration enterprises, intensified publicity and promotion, summarize and promote typical experience and practice and gradually improved the e-commerce demonstration system through pioneering steps, gathering development and pattern innovation based on demonstration bases and demonstration enterprises. In accordance with the Circular on Carrying out E-commerce Demonstration and the Specification for Creating E-commerce Demonstration Enterprises and on the basis of fairness, impartiality and openness, the Ministry of Commerce determined 155 enterprises as e-commerce demonstration enterprises during 2015-2016[®] after reporting, review, disclosure and other processes.

4. Improve the e-commerce supporting service system

In 2015, the payment institutions of China strived to develop the internet payment services, which promoted the rapid development of e-commerce and internet finance and played a positive role in supporting the transformation and upgrading of the service industry. In the first three quarters of 2015, the payment institutions accumulatively handled 56.25 billion internet payment services with the value of RMB 32.97 trillion with a year-on-year growth of 128.95% and 98.80% respectively. In order to standardize the internet payment services of non-banking payment institutions, mitigate payment risks and protect the legal rights and interests of the parties concerned, the People's Bank of China promulgated the Administrative Measures for Internet Payment Services of Non-banking Payment Institutions[®] in December 2015. The Measures contain 57 articles in 7 chapters. Main contents include basic requirements of payment institutions and internet payment business, client management, business management, risk management and protection of rights and interests of clients. The Measures have an important role in the promotion of the innovation of payment services, healthy development of payment market and the basic role of internet payment in the internet finance.

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^o Ministry of Commerce. Announcement of the Ministry of Commerce of the People's Republic of China [2015] No.26 published the list of e-commerce demonstration enterprises during 2015-2016 made by the Ministry of Commerce

[©] People's Bank of China. Administrative Measures for Internet Payment Services of Non-banking Payment Institutions [EB/OL] (December 28, 2015) [December 31, 2015]. http://www.gov.cn/zhengce/2015-12/28/content 5028605.htm.

According to the requirements of the Several Opinions on Promoting the Development of the Express Delivery Sector[®] promulgated by the State Council, the State Post Bureau vigorously promoted the supply-side structural reform, turned around immoderate reliance on e-commerce business and on homogenous price competition, strived to reorient the business structure from traditional e-commerce market to manufacturing, agricultural and cross-border trade market to explore the new path of transformation and upgrading and redeploy the strategic direction of the whole industry. In 2015, 20.67 billion express mails were delivered in China and the business income was RMB 276.96 billion with the average income from each express mail of about RMB 13.40.

In 2015, the Ministry of Commerce actively promoted the renewal project of knowledge of national ecommerce professional and technical personnel. Based on the national continuing education base platform for e-commerce talents, it set up 15 e-commerce talent training branches with 85,000 training students in total.

5. Actively participate in international exchanges and cooperation

On December 15, 2015, on the 14th Meeting of the Council of Heads of Government of Member States of the Shanghai Cooperation Organization, Prime Li Keqiang proposed that, China believed that the SCO E-commerce Union could be established as soon as possible to facilitate efficient and convenient cross-border e-commerce among companies of member states[®].

When drafting the Rules for Resolution Procedures for Online Disputes over Cross-border E-commerce by the Third Working Group of the United Nations Commission on International Trade Law and the Model Law on Transferable Electronic Records by the Fourth Working Group of the United Nations Commission on International Trade Law, the Ministry of Commerce made active studies and put forward constructive suggestions. In February 2015, the proposals of Chinese delegation were formally written in the A/CN.9/833 No. * document of the Third Working Group of the United Nations Commission on International Trade Law; in June 2015, Paragraph 352 of A/70 No.17 document of the United Nations Commission on International Trade Law specified that: "According to the meeting, any text henceforth shall take advantage of the progress made in the third proposal and other proposals".

In 2015, under the framework of regional economic cooperation of Shanghai Cooperation Organization and BRICS, the Ministry of Commerce established a mechanism for e-business dialogues; actively promoted the negotiations on e-commerce of China-South Korea FTA, China-Australia FTA, CJK FTA and RCEP FTA; and actively drove the e-commerce cooperation of the countries along the Belt and Road.

1.3 Characteristics and trends of the Development of E-commerce in China

1.3.1 Major characteristics

1. E-commerce become a pilot field of the "Internet Plus" action plan

In 2015, under the guidance of the Guiding Opinions on Actively Propelling the "Internet Plus" Action Plan of the State Council[®], all ministries and commissions under the State Council and local governments began to fully implement the "Internet Plus" action plan. Among the "Internet Plus" action plan fully implemented by the autonomous regions of all ministries and commissions, E-commerce become a pilot field of the "Internet Plus" action plan.

⁽⁰⁾ State Council. Several Opinions of the State Council on Promoting the Development of the Express Delivery Sector [EB/OL] (October 26, 2015) [February 23, 2016].

http://www.spb.gov.cn/zcfg/flfgjzc/201510/t20151030_672427.html.

[®] Li Keqiang. Remarks at the Extended Session of the 14th Meeting of the Council of Heads of Government of Member States of the Shanghai Cooperation Organization [EB/OL] (December 15, 2015) [February 23, 2016].

http://www.gov.cn/guowuyuan/2015-12/15/content_5024480.htm.

^(a) State Council. Guiding Opinions of the State Council on Actively Propelling the "Internet Plus" Action Plan [R/OL]. (July 4, 2015) [January 23, 2016].

http://www.gov.cn/zhengce/content/2015-07/04/content_10002.htm.

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In the "Internet Plus" action plan, the Ministry of Industry and Information Technology required to launch industrial e-commerce pilot projects in some regions and promote coordinated innovation and dynamic development in industrial e-commerce platform, third-party logistics and internet finance to foster a number of e-commerce pilot centers, platforms and enterprises; and apply e-commerce to develop innovative online marketing modes such as e-commerce direct marketing, social e-commerce and cross-border e-commerce[®]. The Ministry of Commerce put forward that the main tasks of the "Internet Plus" action plan were to build a safe, efficient, unified, open, competitive and orderly circulation industry upgrade[®] in such fields as application of e-commerce in rural areas, application of e-commerce in small and medium-sized cities, application of e-commerce in communities, online and offline integration and cross-border e-commerce.

In 2015, all industries and regions deemed the promotion of the development of e-commerce as important means for transforming the pattern of economic development and promoting the sustainable development of local economy. The top priority of Fujian was to accelerate the construction of Cross-strait E-commerce Economic Cooperation Experimental Zone and e-commerce demonstration cities and demonstration systems[®]. Henan launched the "Internet Plus" e-commerce action, striving to make new breakthroughs in cross-border e-commerce and online and offline interactive experiential economy[®]. In the key working scheme for "Internet Plus" in 2015, Sichuan introduced e-commerce in finance, culture, tourism and other fields[®]. Hunan especially established a provincial joint conference system for the development of mobile internet industry and Hunan Economic and Information Technology, Changsha Economic and Information Commission and Changsha National High-tech Industry Development Zone set up a joint working mechanism.

2. Online retail entered into a new stage "upgrading"

In 2015, online retail industry of China entered into a new stage "upgrading". Fundamental changes in the proportion of trading modes have taken place. The B2C (Business to Customer) mode, represented by Tmall, surpassed C2C (Customer to Customer) mode represented by taobao for the first time. The former accounted for 51.9% the market and became the main entity of market[®]; the GMV of mobile internet retail also exceeded that of PC internet retail for the first time.

Many traditional circulation enterprises transformed their development philosophy, actively explored new models of internet retail suitable for their own characteristics and realized the internet transformation of traditional retail enterprises through the integration of goods, services, prices and other aspects from online and offline channels. Suning Commerce, Wangfujing, RT-MART, Intime Department Store and other traditional department store retailers successively tried online sales to occupy network market. O2O innovation and entrepreneurship activities for service internet retail surged. Mobile marketing means were widely used in fresh food, catering, rental, domestic services,

^o Ministry of Industry and Information Technology. Action Plan of the Ministry of Industry and Information Technology for the Implementation of the Guiding Opinions of the State Council on Actively Propelling the "Internet Plus" Action Plan (2015-2018) [EB/OL] (November 25, 2015) [January 23, 2016]. http://www.miit.gov.cn/n1146290/n4388791/c4538291/content.html.

[®] Ministry of Commerce. Circular of the General Office of the Ministry of Commerce on Issuing the Action Plan for "Internet Plus Circulation" [EB/OL] (May 16, 2015) [January 23, 2016]. http://www.gov.cn/xinwen/2015-05/16/content 2863204.htm.

[®] People's Government of Fujian Province. Circular of the People's Government of Fujian Province on

Ten Measures for Accelerating the Economic Development of the Internet [EB/OL] (March 23, 2015) [January 23, 2016]. http://www.fiet.gov.cn/zjswt/jgzn/jgcs/zcfgc/zcwj/201503/t20150323_146184.htm.

^a People's Government of Henan Province. Circular of the People's Government of Henan Province on Issuing the Implementing Program of Henan Province for "Internet Plus" Action Plan [EB/OL] (October 8, 2015)

[[]January 23, 2016]. http://www.henan.gov.cn/zwgk/system/2015/10/21/010592951.shtml.

People's Government of Sichuan Province. Circular of the General Office of the People's Government of Sichuan Province on Issuing Key Working Scheme of Sichuan Province for "Internet Plus" in 2015 [EB/OL] (June 11, 2015) [February 23, 2016].

http://www.sc.gov.cn/10462/10883/11066/2015/6/15/10339535.shtml.

[®] China International Electronic Commerce Center; China National Commercial Information. Research Report on Development of Retail Industry in China [EB/OL] (April 12, 2016) [April 23, 2016]. http://www.qianinfo.com/Industry/7/3351345.html.

medical and other fields, which facilitated the consumption of netizens.

Online shopping festival mobilized the enthusiasm of the whole people to participate in e-commerce. "11.11" Shopping Festival became the world's largest online shopping day. On November 11, 2015, the GMV of the whole network on this day reached RMB 122.94 billion, in which, that of Tmall reached RMB 91.217 billion which refreshed the national records for 24-hour e-commerce retail; 680 million parcels were produced on the whole network and the netizens in 232 countries and regions participated in shopping activities of the Shopping Festival. Jingdong "618" shopping activities provided a carnival party with such six themes as "global direct supply, intelligent life, network finance, mobile social network, national pastime and convenience". Suning Commerce launched "818" e-commerce promotion activities, and "granted credit" for consumption of millions of peasants through Tesco township direct-sale stores (service stations) in concert with over 1600 offline outlets.

3. Expand rapidly industrial e-commerce to the upstream and downstream of supply chains

In recent years, the scale of industrial e-commerce expanded year by year and the enterprises had much higher enthusiasm and initiative than before. Relying on increasingly rich social resources in the upstream and downstream of supply chains aggregated in industrial e-commerce, the quality and efficiency of the development of industrial e-commerce was continuously improved.

In 2015, through establishing a collection and sales platform, industrial enterprises promoted the integration of e-commerce with the internal business and management information system and realized the rapid integration of upstream and downstream information and the radiation and guidance on small and medium-sized enterprises. On the basis of the original supply chain e-commerce model, Beiqi Foton Group integrated sales, production, procurement, finance, after-sales service and other information systems to build a public e-commerce platform based on the supply chain of automobile industry. Red Collar Group transformed the middlemen mode (C2B2B) and business-to-consumer retail mode (B2C) of e-commerce into "C2M mode - factory direct selling driven by consumer demand", which created a set of producing and selling methods for industrial assembly line and large scale production of customized products. Haier Group established the "whole flow parallel interactive innovation ecosystem", which extracted common demand from personalized needs through the open internet innovative platform and formed an efficient connection between user requirements and global first-class innovative resources.

Such comprehensive e-commerce platforms as 1688, Hc360.com, www.DHgate.com and Made-in-China.com successively explored the transformation from simple provision of information for disclosure to trading services, supply chain finance and others. TrustPass started to provide online trading services for the small and medium-sized enterprises that engage in domestic trade; Huopin provided wholesale group-purchase services and taogch.com provided customized processing services for ecommerce sellers and factories. The business scope of such industrial e-commerce service platforms as Ouyeel, zhaogang.com, isuwang.com, www.yimei180.com and SMM has been expanded to online trading, logistics and payment by credit.

4. Cross-border e-commerce spread gradually

Cross-border e-commerce became the new highlight of e-commerce in China in 2015, which is not only because its growth rates ranked first in the forms of e-commerce, but also because it had been fully under way.

In 2015, by taking the regional and industrial advantages, the China (Hangzhou) Cross-border Ecommerce Comprehensive Pilot Area improved the public service platform for cross-border ecommerce, the customs supervision platform and the inspection and quarantine supervision platform and built a new pattern with the connection of "domestic trade and foreign trade" and coordinated development of "online and offline", which provided practical experience for all regions to carry out pilot program of cross-border e-commerce.

From July 2013 to December 31, 2015, the pilot program for cross-border e-commerce services in Zhengzhou, Henan examined and released inward and outward articles with total value of RMB 4.104 billion; Heilongjiang constructed five overseas warehouses in Russia and sent 13.85 million international postal parcels to Russia with the cargo volume of 2960 tons. Value of cross-border e-commerce exports to Russia from Heilongjiang exceeded USD 400 million with a year-on-year growth of 30%; since the launch of the pilot program for cross-border e-commerce exports in Yiwu, Zhejiang from December 24, 2014, the daily exports increased from 2,000 orders at the preliminary stage to 50,000 orders a day; the export business scale of Jilin Changchun Xinglong Free Trade Zone in 2015 was 200 times that in 2014. Jilin Changchun Xinglong Free Trade Zone handled nearly 100,000 parcels a day. Its business scope covered more than 190 countries and regions including Russia, South Korea and Germany; it became an important core node city for cross-border e-commerce in north China; from January to September 2015, the number of parcels posted from cross-border e-commerce in Chongqing was 8.9 times that in the same period of 2014 and the turnover reached 7.1 times that of 2014.

5. Rural e-commerce was quickened

In 2015, the construction of e-commerce rural service stations was fully under way. Jointly driven by the governments at all levels and the market, the GMV of e-commerce involving agriculture significantly

increased. E-commerce became an important means of rural poverty alleviation.

The Ministry of Agriculture further advanced the pilot work on bringing information to villages and households. It increased 51 pilot counties (cities and districts) in the 10 pilot provinces (municipalities) that had carried out pilot programs, and increased 16 pilot provinces including Tianjin and 43 pilot counties (cities and districts), namely 94 pilot counties (cities and districts) in total, which shall be taken as the second batch of pilot counties to bring information to villages and households.

As at December 2015, there have been 195 million rural netizens, increasing by 16.94 million netizens at 9.5%⁽¹⁾ compared with those at the end of 2014 and accounting for 28.4% of all netizens in China. E-commerce enterprises represented by Alibaba, Jingdong and Suning launched the rural e-commerce plan respectively. "Facilitating the flows of e-commerce to rural areas" had become a trend. By the end of December 2015, rural taobao of alibaba has covered 28 provinces and more than 250 counties and built more than 12,000 village-level rural taobao service stations. "Rural taobao partner and Taobangshou (assistant of rural taobao partner)" launched by Alibaba Group, "rural agent" launched by Jingdong and the internal entrepreneurship plan launched by SF Express drove hundreds of thousands of rural residents to join e-commerce entrepreneurship and employment.

Weifang, Shandong realized two-way conveyance of "network goods into the rural areas" and "agricultural products into urban areas" by building county-level operating centers and village-level service outlets. In 2015, the GMV of e-commerce of agricultural products in Weifang reached RMB 5 billion. Total number of rural e-commerce enterprises exceeded more than 1,000 and that of network shops exceeded 10,000; leading agricultural enterprises, cooperatives, family farms and wholesale market that carried out e-commerce reached 300. Pingxiang, Hebei set up a leading group for e-commerce industry to prepare support policies for e-commerce development. Its financial department allocated directional support funds for e-commerce development of RMB 3 million every year to establish a three-level online shop operating system, a village distribution system and a talent cultivation system covering the whole county, and guided and drove low income families to engage in e-commerce entrepreneurship depending on such support as special funds for poverty alleviation, small loans and interest subsidy for poverty alleviation.

6. E-commerce effectively drove "public entrepreneurship and innovation"

In March 2015, the General Office of the State Council issued the Guiding Opinions on Development of Group Innovation Space and Promotion of Public Innovation and Entrepreneurship[®], which arranged to promote the public innovation and entrepreneurship and specified eight key tasks and three main measures. E-commerce quickly became major choices of innovation and entrepreneurship recognized by all circles.

According to the statistics of the State Administration for Industry and Commerce, during January-April 2015, there were 4,066,000 new market entities registered in China, with a year-on-year growth of 13.5%. Among them, there were 308,000 new enterprises in the third industry with a year-on-year growth of 8.6%; 21,000 enterprises in information transmission, software and information technology service industry with a year-on-year growth of 46.4%[®], showing a trend of rapid growth.

To implement the innovation-driven development strategy and drive the public to start businesses and make innovations in a greater range, at a higher level and with deeper development, all regions follow market laws, actively explore high-level and distinctive demonstration bases of public entrepreneurship and innovation and build perfect entrepreneurial and innovation service chain to promote the integrated development of technology and economy. Liaoning, Shanxi and other provinces built a batch of ecommerce training bases at the provincial level, organized e-commerce training for personnel of competent commercial departments at all levels, the relevant government department and enterprises to further improve the survival rate and quality of small and micro enterprises and achieve accurate support for small and micro enterprises. Some villages and towns in Guangdong, Anhui and other provinces actively supported online sales of "one product of one village" and "one product of one town", which attracted many young people to return to the countryside to conduct business online, and aroused the enthusiasm of telecom departments to construct rural broadband and reinforced the increase in speed and reduction in fees of rural network.

http://cnnic.cn/gywm/xwzx/rdxw/2015/201601/t20160122_53283.htm.

^o China Internet Network Information Center. The 37th Statistic Report on Development of Internet Network in China [R/OL] (January 22, 2016) [April 23, 2016].

[®]General Office of the State Council. Guiding Opinions of the General Office of the State Council on Development of Group Innovation Space and Promotion of Public Innovation and Entrepreneurship [EB/OL] (March 11, 2015) [February 23, 2016]. http://www.gov.cn/zhengce/content/2015-03/11/content_9519.htm.

[®] State Administration for Industry and Commerce. Report on the Development of Market Entities in China in April 2015 [EB/OL] (May 20, 2015) [February 23, 2016]. http://www.saic.gov.cn/zwgk/tjzl/.

1.3.2Trends

1. E-commerce will become a major driver of the development of new economy

At present, the development of national economy in China is in a crucial stage. To speed up the development of new economy become the concerns of all industries. Taking e-commerce as the lead and stimulating consumption and domestic demand through the development of e-commerce to drive the rapid development of the new economy in the right direction become the consensus of theoretical cycles and business circles. E-commerce has become a major driver of the supply-side structural reform and the development of new economy.

Under the current situation of debilitative effect of investment pulling and low demand of foreign trade, the consumption and domestic demand stimulated by e-commerce played an increasingly important role in the development of the economy. E-commerce is a typical case of successful application of modern information technology in the commercial field, which made the channels of commodity circulation extend to every corner of rural areas in China and all places around the world, expanding the market for the development of all industries; the application of big data and cloud computing improved greatly the exchange of information among producers and consumers and the circulation efficiency of commodities, thus guiding all industries to adjust industrial development direction and to make production according to the demand.

Because e-commerce had huge advantages in improving the circulation efficiency and reducing the transaction costs. E-commerce gradually expanded from e-retailing to the circulation of raw materials and semi-finished products in the manufacturing field and further extended to finance, tourism, logistics, entertainment, transportation, medical, environmental protection and other service industries. At the same time, a batch of e-commerce enterprises represented by Eleme, Tuniu, Aihuishou and Edaixi would become benchmarking enterprises for entrepreneurship of young people and played an important exemplary role in promoting the public entrepreneurship and innovation and full employment.

2. The development of e-commerce platforms will reach a new high

In 2016, the development of e-commerce platforms will reach a new high in terms of both breadth and depth. Firstly, the services they provide tend to be comprehensive rather than single services and the fields they are involved in will continue to expand with more prominent concentration; secondly, their service mode will continue to update, presenting the characteristics of interaction and cross-region; thirdly, vertical trading platforms and supporting professional service platforms will be rapidly developed. These platforms will, through personalized services, perfect rule systems, diversified functions and interaction with a huge number of users, lay a solid foundation in the formation of e-commerce ecosphere.

Non-physical trading will be a new focus in the development of platform economy. The service ecommerce platforms had broad development space. Under the impetus of the "Internet Plus" action, traditional services will quickly transfer to e-commerce platforms. Based on new information technologies, more and more e-commerce platforms will emerge, such as household management services, health, medical and other comprehensive service platforms for urban and rural communities, e-commerce platforms on cultural products, credible public service platforms that ensure the safety of mobile finance and trade, and one-key life service platforms covering household management, travel, laundry maintenance and other services.

Led by e-commerce platforms, industrial platform groups covering different fields will be gradually highlighted and form an important and the most dynamic part of the new economy - platform economy.

3. E-commerce will be developed into the direction of intelligence and ubiquity

In 2016, cloud computing, big data, mobile internet, internet of things and other new technologies will play a more and more important role in the e-commerce industry.

Cloud computing will provide a stable technical support for online shopping festivals with a greater volume and daily online transactions; Cloud services and big data will be applied in a large scale in customs clearance, free trade zones and cross-border e-commerce comprehensive pilot areas to improve the efficiency of customs clearance, achieve "declaration, inspection and release at one stroke" and greatly improve the level of facilitation of international trade.

The application of big data provides powerful guarantee for systematically analyzing customer consumption and enhancing the level of precision marketing of e-commerce sites. New digital marketing will finish the closed cycle from "consumer insight", to "precise orientation of demand", to "online and offline integration", to "accurate measurement of effects" and to "feedback on big data". From the portal marketing era relying on traffic to search marketing era, now e-commerce has entered the big data marketing era. Personalized marketing provided good conditions for e-commerce industry chain to expand to the upstream and downstream. Under the influence of big data on online transactions, more new modes of customized production and sales will help the successful transformation of production-oriented enterprises.

The trend of mobile internet is more and more obvious. E-commerce companies are targeting the new promising market. As a result, APPs will spring up. Mature application of Internet of Things technologies will also raise the level of e-commerce distribution to a new high.

Future e-commerce enterprises will be not only the circulating industrial entities, but also research and development entities of e-commerce technology and innovative entities of e-commerce modes. E-commerce enterprises will, combine with production-oriented enterprises, arrange advanced technologies, promote independent innovation of core technologies, create and grasp more business opportunities, participate in competition in the international market and expand overseas development space.

4. International e-commerce will be further speeded up

In November 2015, the sixth China-Japan-South Korea leaders' meeting was held. "Considered the importance of e-commerce to invent new economic value", the leaders of the three countries would focus on promoting e-commerce collaboration in high added-value products, encourage the three countries to share the information in the e-commerce category, promote the process of "integration of e-commerce and shopping malls" of China, South Korea and Japan. From the launch of Korea Tmall, to the establishment of a Chinese version for Chinese users successively by G-Market, the largest e-commerce site in South Korea, the forms of cooperation between Chinese e-commerce and foreign e-commerce will be more and more diversified and the scope of Chinese e-commerce activities in the international Market will be larger.

The construction of "One Belt One Road" brings a scene of vigorous development of cross-border ecommerce in the areas along the One Belt One Road. In virtue of dividend policies, e-commerce enterprises in China will strengthen the leadership in cross-border e-commerce, focus on expanding emerging markets along the "One Belt One Road" and promote more "made in China" to go out.

To reduce the circulation costs of overseas commodities, more companies will start to build overseas warehouses, make foreign logistics systems to shorten the time of delivery of commodities to consumers and save transaction costs. According to the planning of the Ministry of Commerce, in the next 1 to 2 years, China will build 100 overseas e-commerce warehouses[®]. The initiative will greatly improve the level of internationalization of China's e-commerce enterprises.

In 2015, Chinese enterprises actively made many overseas mergers and acquisitions. E-commerce companies will also begin to do so. Video sites, overseas sales sites and some small and medium-sized overseas e-commerce enterprises have become the targets to be merged and acquired by China's e-commerce enterprises. In 2016, China's e-commerce enterprises will further enlarge the number and size of overseas mergers and acquisitions to break a new path to international development of e-commerce.

5. E-commerce will be developed into the direction of standardization and legalization

In 2016, the State Administration for Industry and Commerce will start the construction of the "national supervisory system for third party network commodities trading platforms" and the "national supervisory service system for e-commerce sites"; it will, focusing on credit regulation, strive to build new mechanisms for interim and ex post regulation, establish and perfect coordinated credit regulation

[®]General Office of the Ministry of Commerce. Circular of the General Office of the Ministry of Commerce on Issuing the Action Plan for "Internet Plus Circulation" [EB/OL] (May 15, 2015) [February 23, 2016].

http://dzsws.mofcom.gov.cn/article/zcfb/201505/20150500972952.shtml.

mechanisms and coordinate the relevant departments in jointly issuing disciplinary measures;

establish a unified national "system library for lists of enterprises with abnormal operation" and a "library for lists of enterprises seriously losing honesty" by using big data resources to reach full sharing and effective use of information on enterprises seriously losing honesty between the departments and districts.

For serious violation of laws and rules in the e-commerce field, including internet fraud, false sales promotion, personal information leakage, etc., the relevant national departments will strengthen the regulation on e-commerce, continue to carry out special actions for cracking down on fake commodities online, deepen the protection of consumers' rights in key areas, actively supervise online transactions and enforce the relevant laws and carry out the system whereby business operators involved in consumption links shall bear first inquiry responsibilities and be liable for compensation in advance.

In the context of "Internet Plus" era, pluralistic social governance entities started to carry out "online" governance. The "united" traditional governance mode monopolized by the government in the e-commerce field will be gradually renovated to "pluralistic" collaborative governance mode. The e-commerce governance mode "government domination + social coordination" dominated by government promotion, based on market-based operations and interactively cooperated by polycentric governance entities will become the new choice of "smart livelihood".

The National People's Congress will further promote the drafting of the E-commerce Law. The corresponding implementing rules, such as the Internet to purchase goods for seven days without reason return guidelines "regulations on the express also developed, such as electronic commerce legal system will be more perfect.

Chapter 2 Special Report on the Development Environment Ecommerce

E-commerce policy and legal environment is the important precondition and the basic guarantee for a healthy and orderly development of e-commerce. As e-commerce laws and regulations and policies in China are increasingly perfect, legal consciousness of the parties participating in e-commerce activities continuously improves and e-commerce in China has entered the stage of benign development. This report introduces the current situation of the construction of policies and laws on e-commerce in China, and summarizes the legal practice of e-commerce in key areas under the background of the "Internet Plus" era, and look forward to the development of policies and laws on e-commerce.

2.1 E-commerce policy and legal environment

2.1.1 Current situation of the construction of policies and laws on e-commerce

1. China promulgated several policies to encourage, support and guide the healthy development of e-commerce

In 2015, the departments of the State Council and the governments at all levels successively issued several policies to encourage the application of e-commerce innovation and entrepreneurship, enhance the support in e-commerce in such aspects as finance, financing, talent cultivation, infrastructure and supporting system, solve key problems, comprehensively promote the rapid and healthy development of rural e-commerce, mobile e-commerce and cross-border e-commerce and promote the integrative development of e-commerce and other industries.

In March 2015, Li Keqiang, the Premier the State Council, mentioned "e-commerce" in the Report on the Work of the Government[®] for three times and emphasized the continuous promotion of the development of e-commerce: (i) facilitating the transformation and upgrading of foreign trade and expand comprehensive trials in cross-border e-commerce; (ii) developing the "Internet Plus" action plan to promote the combination of mobile internet, cloud computing, big data, Internet of Things etc. and modern manufacturing industry, encourage the healthy development of e-commerce and guide internet-based companies to increase their presence in the international market.

On May 7, 2015, the State Council promulgated the Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®]. The said Opinions points out that, e-commerce becomes the new impetus of economic development. We shall adhere to depend on the reform to promote the scientific development, actively adapt to and guide a new economic development normal, spare no effort to solve the deep-rooted conflicts and major issues in e-commerce development, vigorously propel the innovation in policy, management and service, accelerate to build an open, standard, honest and safe development environment of e-commerce, further motivate the innovative impetus, creative potential and business pioneering vigor of the e-commerce, accelerate to propel the strategic adjustment of economic structure and realize the quality improvement, efficiency improvement and upgrade of economy.

On July 4, 2015, the State Council promulgated the Guiding Opinions on Actively Propelling the Internet Plus Action Plan, which listed "Internet Plus" as one of the major actions and emphasized the continuously deepening of the integration of e-commerce into other industries, further popularization of networked production, circulation and consumption, basic improvement of the environment by virtue of standard specifications, public services etc., active development of rural e-commerce, vigorous development of industrial e-commerce, promotion of e-commerce application innovations and enhancement of international e-commerce cooperation to further expand the e-commerce development space.

^a Li Keqiang. The Report on the Work of the Government (2015) [EB/OL] [March 5, 2015] [March 16, 2015] http://www.gov.cn/guowuyuan/2015-03/16/content_2835101.htm

[®] State Council. Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL]. (May 7, 2015) [November 26, 2015].

http://www.gov.cn/zhengce/content/2015-05/07/content_9707.htm

On June 16, 2015, the General Office of the State Council promulgated the Guiding Opinions on Promoting the Healthy and Rapid Development of Cross-border E-commerce[®]. The Opinions put forward specific support measures: optimization of customs supervisions, improvement of inspection and quarantine supervisory policies, clarification of import and export tax policies, enhancement of the management of e-commerce payment and settlement and provision of fiscal and financial assistance etc..

On September 18, 2015, the General Office of the State Council issued the Opinions on Promoting Online and Offline Interaction to Accelerate the Innovative Development, Transformation and Upgrading of Commerce Circulation[®]. For the implementation of the decisions and arrangements of the State Council, the Opinions put forward the following specific measures: 1. encouraging the innovation in online and offline interaction; 2. stimulating the vitality of commercial development of entities; 3. perfecting the modern market system; and 4. improving policy measures. In addition, the Opinions specified specific responsible departments.

2. Significant progress was made in e-commerce legislation

1) The E-commerce Law was orderly legislated by the National People's Congress

The legislation of the E-commerce Law of the People's Republic of China led by the Financial and Economic Committee of the National People's Congress was listed in the legislation scheme of the Standing Committee of the 12 National People's Congress. In December 2013, the drafting group for the E-commerce Law was set up and started the legislation of the E-commerce Law. The drafting group was composed of 14 special research groups to make systematic research on the issues involved in the e-commerce legislation. In 2014, 14 sub-topics had been completed, mainly including: e-commerce regulatory system, e-commerce field, intellectual property protection of online data products, e-commerce taxation, e-commerce dispute settlement mechanism, protection of rights and interests of consumers, electronic trading information security, cross-border e-commerce, e-commerce product quality supervision, coordinated development of express and e-commerce, e-commerce trusted trading environment, etc.

The Outline of the E-commerce Law was drafted in March 2015 and the E-commerce Law (Draft) was completed at the end of 2015. Maintaining problem-orientated, the E-commerce Law (Draft) specified such contents as responsibilities of e-commerce operating entities, trading and service security, data information protection, protection of rights and interests of consumers, market order and fair competition. The formulation and implementation of the E-commerce Law will strongly promote the development of e-commerce, regulate industry and market order and protect the legitimate rights and interests of the related parties[®].

2) The relevant e-commerce regulations, departmental rules and policy documents were intensively promulgated

With the vigorous promotion of e-commerce legislation, all relevant departments also actively promoted the research and formulation of the relevant e-commerce regulations and policy documents.

On May 13, 2015, the Ministry of Commerce promulgated the Circular on Issuing the Action Plan for "Internet Plus Circulation"[®].

^o General Office of the State Council. Guiding Opinions on Promoting the Healthy and Rapid Development of Cross-border E-commerce [EB/OL] (June 16, 2015) [November 26, 2015]. http://www.gov.cn/gongbao/content/2015/content_2893139.htm

^(a) State Council. Opinions on Promoting Online and Offline Interaction to Accelerate the Innovative Development, Transformation and Upgrading of Commerce Circulation [EB/OL] (September 29, 2015) [November 26, 2015].

http://www.gov.cn/zhengce/content/2015-09/29/content_10204.htm

^(a) www.legaldaily.com.cn. Draft of the E-commerce Law has been completed [EB/OL]. (March 11, 2016) [March 31, 2016].

http://www.legaldaily.com.cn/bm/content/2016-03/11/content_6520163.htm?node=20730

⁽⁶⁾ Ministry of Commerce. Circular on Issuing the Action Plan for "Internet Plus Circulation" [EB/OL] (May 15, 2015) [December 1, 2015].

The Circular emphasizes the enhancement of top-level design and the improvement of public investment and environmental construction by taking the "Internet Plus Circulation" as a carrier, the promotion of the transformation and upgrading of the traditional circulation industry by the means of demonstration, training and publicity and under the drive of technology innovation and business model innovation, the important role of e-commerce in releasing consumption potential, activating the industry and increasing employment opportunities, etc., so as to create the new pattern of "public entrepreneurship and innovation".

On July 1, 2015, the State Administration for Industry and Commerce issued the Interim Measures for the Supervision and Administration of Internet Advertisements (Draft for Comment)¹⁰, which specified the requirements that the advertisements issued by e-commerce sites and other internet media resources shall be identifiable and other requirements.

On July 18, 2015, the Legislative Affairs Office of the State Council, the People's Bank of China and other eight departments jointly issued the Guiding Opinions on Promoting the Healthy Development of Internet Finance[®]. The Opinions proposed to encourage innovation, support steady development of internet finance internet, guide by category, specify internet finance supervision and administration responsibility, complete the system and standardize the order of the internet finance market. They specified the connotation and legal essence of internet finance, systematically outlined the support and encouragement policies for administrative services, taxation, law and other basic frames.

On July 22, 2015, the China Insurance Regulatory Commission promulgated the Circular on Issuing the Interim Measures for the Supervision of Internet Insurance Business[®]. The Interim Measures specified business insurance types, business subjects, business behaviors and other specific business matters on internet insurance business.

On October 31, 2015, the General Office of the State Council promulgated the Guiding Opinions on the Promotion of the Development of Rural E-commerce[®]. The Opinions point out that e-commerce is an important means to change the agricultural development modes, and an important carrier of precise poverty alleviation. The development of rural e-commerce will be achieved together with the development of both physical stores through public entrepreneurship and innovation and the functioning of the market mechanism so that the real economy and Internet will produce a superimposed effect, which is conducive to stimulating consumption, increasing domestic demand, promoting agricultural upgrading and rural development and increasing the incomes of rural residents.

Revise the existing laws to safeguard the healthy development of e-commerce 3)

On April 24, 2015, the 14th Session of the Standing Committee of the National People's Congress passed the revised Food Safety Law for implementation as of October 1, 2015. The Law specified three obligations of providers of third-party platforms for online food trading: 1. general obligations conducting the real-name registration for the online food traders and defining the food traders' management responsibilities; 2. management obligations - reviewing the licenses of the food traders that shall obtain licenses for operation in accordance with the law; upon the discovery of any illegal behavior or serious illegal behavior of the online food traders, providers of third-party platforms for online food trading shall timely stop the behavior, report the same to the food and drug administrations or stop the provision of services; 3. obligations on the protection of rights and interests of consumers.

On April 24, 2015, the 14th Session of the Standing Committee of the National People's Congress revised the Law of the People's Republic of China on Electronic Signatures. The revised Law on Electronic Signatures stipulates that the legal entity that provides electronic certification services must be an enterprise as a legal person; it deletes such contents as "An applicant shall complete formalities for enterprise registration at the administrative department for industry and commerce in accordance with the law and upon the strength of electronic certification licensing certificate" set forth in Paragraph Il of Article 18 of the original law.

The newly revised Advertising Law of the People's Republic of China has been implemented as of

[December 1, 2015]. http://www.gov.cn/xinwen/2015-07/18/content-2899360.htm

[®] State Administration for Industry and Commerce. Interim Measures for the Supervision and Administration of Internet Advertisements (Draft for Comment) [EB/OL] (July 2, 2015) [December 1, 2015]. http://www.gov.cn/xinwen/2015-07/02/content 2888753.htm

[©] Government of China. Guiding Opinions on Promoting the Healthy Development of Internet Finance released by the People's Bank of China and other nine departments [EB/OL] (July 18, 2015)

China Insurance Regulatory Commission. Circular on Issuing the Interim Measures for the Supervision of Internet Insurance Business [EB/OL] (July 27, 2015) [December 1, 2015]. http://www.circ.gov.cn/web/site0/tab5168/info3968308.htm

<sup>
 ®</sup> State Council. Guiding Opinions on the Promotion of the Development of Rural E-commerce [EB/OL]
 (November 9, 2015) [December 1, 2015].

http://www.gov.cn/zhengce/content/2015-11/09/content 10279.htm

September 1, 2015 and the first revision in 20 years. The Law incorporates the behavior that an advertiser uses the internet to publish an advertisement into the adjustment scope and defines advertisers, behaviors and methods of publication of advertisements, responsibilities and legal consequences of advertisers, which is of great significance to standardize the healthy development of internet advertisement and e-commerce.

The Amendment (IX) to the Criminal Law of the People's Republic of China implemented as of November 1, 2015 strengthens the protection of internet security, incorporates such behaviors as selling or providing others with the personal information of a citizen in violation of the provisions of the State, obligations of network service providers for managing the security of information networks, making crimes through internet, spreading false information through internet and assisting in internet crimes, into the adjustment scope of the Criminal Law and prepares the corresponding penalty provisions.

3. All local governments increased the support on e-commerce

Under the guidance of relevant documents of the central government on promoting the development of e-commerce, departments of local government at all levels also continued to increase the support on e-commerce and successively issued over two hundred special or comprehensive documents on the promotion of the development of e-commerce, which generally include concrete measures and plans and act as major initiatives on e-commerce for the promotion of economic transformation and upgrading.

On June 24, 2015, the People's Government of Fujian Province issued the Nine Measures for Accelerating the Development of E-commerce[®], which proposed nine specific measures including building an e-commerce platform for selling goods of Fujian Province, promoting the construction of an online professional market for goods of Fujian Province, establishing cross-border e-commerce distribution centers and exhibition and trading centers in special area supervised by customs or the regions that meet the customs, inspection and quarantine supervisory conditions.

On July 20, 2015, the Shanghai Municipal People's Government issued the Several Opinions on Promoting the Cross-border E-commerce Development in Shanghai Municipality[®]. The Opinions proposed to guide the development of cross-border e-commerce industry in Shanghai towards the scale, standardization, clustering and regulation, and cultivate a complete industrial chain so as to shape a landscape for the development of cross-border e-commerce featuring simultaneous progress of third-party platforms and self-operated platform, co-participation of both domestic and overseas e-businesses, as well as equal prioritization of import and export, coexistence of multiple approaches and orderly combination of online and offline operations.

On July 30, 2015, the People's Government of Shandong Province issued the Action Plan on Crossborder E-commerce Development[®]. The Plan emphases on comprehensively promoting export business of cross-border e-commerce and encouraging conditional cities and enterprises to carry out pilot import business of cross-border e-commerce by taking "Internet Plus Foreign Trade" as the carrier, focusing on business model innovation and by means of demonstration, training, and policy support.

On September 30, 2015, the People's Government of Jiangxi Province issued the Several Measures for Implementing the Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®]. Special measures include supporting the financing of e-commerce enterprises, supporting the construction of e-commerce public service platform, accelerating the improvement of e-commerce logistics distribution system, promoting the popularity of e-commerce application, cultivating e-commerce brands and characteristic platforms, developing rural e-commerce and promoting the development of cross-border e-commerce, etc..

http://www.jinanport.gov.cn/art/2015/8/10/art_7766_729857.html

^o People's Government of Fujian Province. Nine Measures for Accelerating the Development of Ecommerce [EB/OL] (July 2, 2015) [December 8, 2015].

http://www.fujian.gov.cn/ztzl/jkjshxxajjq/zcwj/201507/t20150703_997771.htm [®] Shanghai Municipal People's Government. Several Opinions on Promoting the Cross-border Ecommerce Development in Shanghai Municipality [EB/OL] (July 20, 2015) [December 8, 2015]. http://www.shanghai.gov.cn/nw2/nw2314/nw2319/nw12344/u26aw44405.html

[®] People's Government of Shandong Province. Action Plan on Cross-border E-commerce Development in Shandong [EB/OL] (August 10, 2015) [December 8, 2015].

[®] People's Government of Jiangxi Province. Several Measures for Implementing the Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (September 30, 2015) [December 8, 2015].

http://www.jiangxi.gov.cn/zzc/ajg/szf/201512/t20151203_1232959.htm

On October 24, 2015, the General Office of the People's Government of Anhui Province promulgated the Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®]. Concentrating on such five aspects as optimizing the development environment, perfecting the supporting system, promoting the transformation and upgrading, strengthening support and guiding the standardized development, the Opinions put forward 21 specific measures, including perfecting e-commerce infrastructure, building a modern logistics and express delivery system, building the internet financial service system and accelerating the development of cross-border e-commerce.

⁽⁰⁾ People's Government of Anhui Province. Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (November 3, 2015) [January 27, 2016].

http://xxgk.ah.gov.cn/UserData/DocHtml/731/2015/11/3/950517054635.html.

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On November 20, 2015, the General Office of the People's Government of Hebei Province promulgated the Implementing Opinions on Promoting the Healthy and Rapid Development of Cross-border Ecommerce[®]. The Opinions emphasized on striving to cultivate cross-border e-commerce market entities, accelerating the construction of efficient, convenient and safe public service platforms for cross-border e-commerce and playing the supporting role of trade logistics systems so as to shape a landscape for the development of cross-border e-commerce featuring simultaneous progress of thirdparty platforms and self-operated platforms, co-participation of both domestic and overseas ebusinesses, as well as equal prioritization of import and export, coexistence of multiple approaches and orderly combination of online and offline operations.

On December 4, 2015, the People's Government of Jiangsu Province promulgated the Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®]. The Opinions required constantly optimizing the development environment, vigorously promoting entrepreneurship and employment, actively advancing transformation and upgrading, improving logistics infrastructure, enhancing the level of opening up, constructing security defense lines, improving supporting service systems and effectively carrying out foundation work.

On December 21, 2015, the General Office of the People's Government of Hainan Province promulgated the Opinions on Advancing the Development of Cross-border E-commerce[®]. The Opinions proposed to adhere to all-round advancing of the construction of service systems, explore the establishment of comprehensive cross-border e-commerce service systems of Hainan Province and promote the healthy development of cross-border e-commerce of Hainan Province. The Opinions were accompanied by a breakdown of working tasks, which listed responsible departments, assistance units and implementing time nodes.

On December 28, 2015, the People's Government of Hunan Province promulgated the Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®]. The Opinions put forward 25 specific measures concentrating on creating a relaxed development environment, promoting employment and entrepreneurship, advancing transformation and upgrading, improving logistics infrastructure, enhancing the level of opening up, constructing security defense lines and improving supporting systems.

On December 30, 2015, the People's Government of Liaoning Province promulgated the Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®]. The Opinions emphasized on insisting in the combination of market domination with government leading and the combination of network economy with real economy and insisting in accelerating the combination of development with standardized management so as to achieve such overall goal as making Liaoning a strong e-commerce province of China.

On December 30, 2015, the General Office of the People's Government of Zheijang Province promulgated the Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force[®]. The Opinions put forward goals and tasks for the development of e-commerce industry by 2020 and seven measures from such aspects as the construction of industry systems, talent training and industry management: i. building perfect ecommerce industry system; ii. comprehensively enhancing the application scope and level of e-

http://zfxxgk.zj.gov.cn/xxgk/jcms files/jcms1/web57/site/art/2016/1/15/art 9501 107501.html.

¹ People's Government of Hebei Province. Implementing Opinions on Promoting the Healthy and Rapid Development of Cross-border Ecommerce [EB/OL] (November 23, 2015) [December 8, 2015]. http://info.hebei.gov.cn/hbszfxxgk/329975/329982/6540318/index.html.

[®] People's Government of Jiangsu Province. Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (December 4, 2015) [January 27, 2016].

http://www.jiangsu.gov.cn/jsgov/tj/bgt/201512/t20151228489639.html

People's Government of Hainan Province. Opinions on Advancing the Development of Cross-border E-commerce [EB/OL] (December 21, 2015) [January 27, 2016].

http://xxgk.hainan.gov.cn/hi/HI0101/201512/t20151228_1739436.htm.

People's Government of Hunan Province. Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (December 29, 2015) [January 27, 2016].

http://www.hunan.gov.cn/2015xxgk/fz/zfwj/szfwj/201512/t20151229_2844298.html.

People's Government of Liaoning Province. Implementing Opinions on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (December 30, 2015) [January 27, 2016]. http://www.ln.gov.cn/zfxx/zfwj/szfwj/zfwj2011_106024/201601/t20160112_2039344.html.

People's Government of Zhejiang Province. Implementing Opinions on Striving to Develop Ecommerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (January 15, 2016) [January 27, 2016].

commerce; iii. constructing unobstructed and efficient e-commerce logistics systems; iv. strengthening entrepreneurship and innovation as well as talent cultivation; v. increasing the opening up of e-commerce; vi. creating a good development and security environment; and vii. reinforcing industry management and services of e-commerce.

4. The implementation of e-commerce standards promotes the development of industry norms

Covering a wide range and many trading links, rapid development of e-commerce can be achieved through close collaboration of all industries and departments, which requires implementing e-commerce standardization and building online trading, modern logistics, credit service, online payment, security certification and other standard supporting systems. In 2015, China promulgated or implemented 12 e-commerce standards, including the E-commerce Platform Operating and Technical Specifications, the Quality Evaluation and Grading of E-commerce Platform Services, the Requirements for Trusted E-commerce Transactions, the Specifications on Recognition of E-commerce Enterprises and the Specifications on E-commerce Logistics Services, etc.

On December 17, 2015, the General Office of the State Council Issued the Plan for the Construction and Development of the National Standardization System (2016-2020) ⁽¹⁾. The Plan arranged the construction of the relevant e-commerce standards from four aspects: i. as e-commerce is an emerging service field, comprehensively improving the level of the standardization of the emerging service field; ii. formulating a series of standards for promulgating product quality information of e-commerce trading products with universal product codes and strengthening the application research on bar code in the regulation of e-commerce products; iii. the application of social credit codes in the fields of e-government affairs and e-commerce; and iv. researching and preparing the standards for e-commerce key technologies and general basic. The Plan requires striving to make breakthroughs in international standards in e-commerce logistics, express logistics and other advantageous fields so as to support the international development of logistics industry.

In 2015, the Standardization Administration actively prepared for the establishment of the National Ecommerce Quality Management Standardization Technical Committee. This is the first time that China deems e-commerce quality management as a standardization technical committee set up for a separate field. The National E-commerce Quality Management Standardization Technical Committee is mainly responsible for the revision of the national standards in such fields as basic, quality management, quality credit, quality supervision and quality risk prevention and control. The Standardization Administration is responsible for the business guidance.

All provinces and cities also actively carried out local e-commerce standardization, and respectively or jointly formulated local standards and enterprise standards. In 2015, Shanghai prepared the Administrative Specifications for Settled Commercial Merchants on the E-commerce Service Platform and the Specifications for After-sales Services on the E-commerce Service Platform. Shenzhen Entry-exit Inspection and Quarantine Bureau formulated the Basic Terms of Customs Clearance, Inspection and Quarantine of Cross-border E-commerce and the Business Processes of Customs Clearance, Inspection and Quarantine of Cross-border E-commerce and the Business Processes of Customs Clearance, Inspection and Quarantine of Cross-border E-commerce and the Business Processes of Customs Clearance, Inspection and Quarantine of Cross-border E-commerce and the Business Processes of Standardization Administration signed the Memorandum of Understanding on Deepening the Reform of Standardization to Speed up the Construction of a Strong Province of Standardization of e-commerce and the standardization construction of internet finance.

2.1.2Legal practice of e-commerce

1. Increase efforts to crack down on counterfeit and shoddy goods online

In recent years, as the relevant government departments have gradually increased the efforts to crack down on counterfeit and shoddy goods and the consciousness of rights safeguarding of consumers has continuously enhanced, e-commerce operators and platform operators continuously strengthened the efforts to crack down on counterfeit and shoddy goods in e-commerce, which made the network trading environment be effectively purified and improved.

In April 2015, the People's Court of Hangzhou Economic and Technological Development Zone pronounced the judgment for the first case of selling counterfeit products on WeChat Moments in Zhejiang. "Wechat business" He XX was sentenced to fixed-term imprisonment of one year with a two-

^o State Council. Circular on Issuing the Plan for the Construction and Development of the National Standardization System (2016-2020) [EB/OL] (December 30, 2015) [January 27, 2016]. http://www.gov.cn/zhengce/content/2015-12/30/content_10523.htm.

year suspension of execution and a fine of RMB 60,000 due to the crime of selling products with counterfeit registered trademark.

In November 2015, the General Office of the State Council issued the Opinions on Strengthening the Governance of Infringement and Counterfeiting on the Internet, aiming to strengthen the governance of infringement and counterfeiting on the Internet and create an open, standardized, trustworthy and safe online transaction environment. The Opinions put forward new overall requirements for promoting the healthy development of e-commerce; and also required implementing the responsibilities of the relevant enterprises, strengthening the cooperation in the law enforcement and perfecting a long-term mechanism.

In December 2015, the General Administration of Quality Supervision, Inspection and Quarantine announced typical cases on law enforcement of anti-counterfeiting e-commerce products in 2015. The e-commerce platforms which sold the relevant counterfeit products have removed their unqualified products sold in the relevant online stores off shelves according to the investigation of quality control departments. Quality control departments also transferred the cases with serious quality problems or suspected of criminal cases to public security organs⁽⁰⁾.

2. Maintain the market competition order of e-commerce

Fair competition order is able to promote the healthy and orderly development of e-commerce industry and safeguard the legitimate rights and interests of e-commerce enterprises, consumers and the parties concerned. Therefore, when revising the Anti-unfair Competition Law, the relevant legislative departments put forward specific legislative suggestions for the typical problems reflected in competition cases among internet enterprises.

In May 2015, Shanghai industrial and commercial departments punished the behavior of Shanghai GOME.COM.CN E-commerce Co., Ltd. of false publicity and fictitious transactions. When making publicity on proprietary air purifiers online, the company modified the data in the test report, falsely claiming "radiation-free", and "scalping" more than two thousand positive comments through fictitious transactions. Industrial and commercial departments recognized that, the above behavior of the company violated Paragraph 1 of Article 9 of the Anti-unfair Competition Law and Item 4 of Article 19 of the Administrative Measures for Online Trading and ordered the parties concerned to stop the violation and to be punished a fine of RMB 160,000[®].

In July 2015, for the violation of the principle of honesty and credibility by professional critics, disturbances of the order of e-commerce market, increase in transaction costs of e-commerce operators and other improper behaviors, Alibaba established an evaluation mechanism for malicious negative comments and started the function of tracing and deleting the malicious negative comments. The establishment of the credit evaluation mechanism for e-commerce consumers will promote the healthy and orderly development of e-commerce market to a certain extent.

3. Strengthen the efforts to crack down on cross-border e-commerce smuggling crimes

Cross-border e-commerce can satisfy shopping needs of consumers in different aspects and different levels, but also evasion of tariffs and customs supervisions, etc. These illegal behaviors disturbed the order of import and export regulation, causing huge losses to national revenues; therefore, except for the promotion of the development of cross-border e-commerce, the efforts to crack down on smuggling acts need to be strengthened.

In April 2015, Liu X in Sichuan was sentenced to life imprisonment by the Intermediate People's Court of Quanzhou City, Fujian for the crime of smuggling weapons due to his cross-border purchase of imitation guns online. In August 2015, the High People's Court of Fujian Province upheld the first-instance judgment. In July 2014, Liu X purchased 24 imitation guns from a Taiwan seller online through a domestic online store act as a purchasing agent. On July 22, 2014, the guns were seized by Shishi Customs Anti-smuggling Branch[®].

⁽¹⁾ National Intellectual Property Strategy. Typical Cases of the General Administration of Quality Supervision, Inspection and Quarantine on Law Enforcement of Anti-counterfeiting E-commerce Products in 2015 [EB/OL] (December 28, 2015) [December 31, 2015]. http://www.nipso.cn/onews.asp?id=29632.

② State Administration for Industry and Commerce. Shanghai Punished GOME.COM.CN E-commerce Co., Ltd. RMB 160,000 for False Publicity, Modification to the Test Report, Fabrication of Trading

Volume and "Scalping" of Positive Comments [EB/OL] (July 22, 2015) [December 31, 2015].

http://www.saic.gov.cn/gzfw/dxal/bgt/201507/t20150722_159320.html.

③ www.news.cn. A Guy Was Sentenced to Life Imprisonment for the Crime of Smuggling Weapons due to His Purchase of 24 Imitation Guns Online [EB/OL] (September 23, 2015) [December 31, 2015]. http://www.fj.xinhuanet.com/news/2015-09/23/c_1116656335.htm On October 28, 2015, according to the Shenzhen Customs, it, in concert with Dalian and other customs, carried out "Justice 14" crackdown on smuggling, which destroyed five smuggling gang of luxury goods, captured 32 persons involved and involved nearly RMB 360 million. After investigation, the customs found that the suspects of smuggling crime were smuggled goods[®] through opening luxury goods stores in the section of the most prosperous business and at the same time shielded by "cross-border e-commerce" online and other means.

4. Implement the new Advertising Law to purify internet advertising

On April 24, 2015, the 14th Session of the Standing Committee of the National People's Congress votes to pass the revised Advertising Law of the People's Republic of China for implementation as of September 1, 2015. The revised Advertising Law contains five articles that specify "internet advertising". Among them, Articles 19, 44 and 45 specify the behaviors of internet advertising and Articles 63 and 64 specify the legal liabilities for illegal internet advertising.

Since February 2015, Shanghai Huamei Medical Cosmetology Hospital Co., Ltd. released on its website "Huamei Medical Cosmetology Hospital, the only unit designated by Shanghai Ninth People's Hospital" "VIP outpatient clinic", etc., and set "Shanghai Ninth People's Hospital" and other words as keywords for baidu promotion. Because failing to obtain the consent of Shanghai Ninth People's Hospital, Shanghai Jiaotong University School of Medicine, it violated the provisions of the Advertising Law and was fined RMB 200,000 by the Shanghai industrial and commercial department.

From August to November 2015, Shanghai Lanxi Investment Co., Ltd. used its own website to publicize "global best investment varieties with extravagant profits and crude oil investment" etc.. The use of the expression "best" to describe its investment products in the advertisement violated the provisions of Item 3 of Article 9 of the Advertising Law on "any advertisement shall not use "best" or other similar words". As a result, it was fined RMB 200,000 by the Shanghai industrial and commercial department in accordance with the law.

5. Strengthen the protection of intellectual property online

Intellectual property is important resources of development and core factors of competitiveness, so is it in the field of e-commerce. The State, society, enterprises and the related parties in the field of e-commerce pay more and more attention to the protection of intellectual property.

The Key Points in the National Actions against Infringement of Intellectual Property Rights and Production and Sale of Counterfeit and Substandard Commodities in 2015 issued by the General Office of the State Council on March 25, 2015 pointed out that, the State Administration of Radio, Film and Television and the General Administration of Quality Supervision, Inspection and Quarantine respectively led in enforcing laws and safeguarding legal rights on patents in the field of e-commerce according to the division of duties, strengthening the supervisory and incentive mechanism for law enforcement and cases handling, playing the support and assistance role of the right safeguarding center and establishing and improving the online patent dispute handling mechanism.

Infringement of intellectual property rights in electronic commerce not only causes damage to legitimate rights and interests of the obligee, but also disturbs the social economic order and affects the enthusiasm of public innovation, and thus affecting the construction of an innovative country. In order to protect the legitimate rights and interests of the holder of the intellectual property right and arouse the enthusiasm for innovation, the law enforcement department of the State Intellectual Property Office continuously increased the efforts to crack down on the infringement.

The data released by the State Intellectual Property Office showed that, in January to November 2015, the national intellectual property system investigated and punished nearly 4000 cases on the infringement and counterfeit of patents in the field of e-commerce[®].

⁽⁰⁾ www.news.cn. smuggling over 6,000 famous brand bags shielded by "cross-border e-commerce" [EB/OL] (November 2, 2015) [December 31, 2015].

http://news.xinhuanet.com/legal/2015-11/02/c_128383845.htm

[®] State Intellectual Property Office. In the past 11 months, the national intellectual property system investigated and punished nearly 4000 cases on the infringement and counterfeit of patents in the field of e-commerce [EB/OL] (December 23, 2015) [December 23, 2016].

http://www.sipo.gov.cn/mtjj/2015/201512/t20151223_1220676.html.

On November 7, 2015, the seminar on Hot Topics on the Protection of Intellectual Property Rights at the "Internet Plus" era was held in Chongqing. The person responsible for the Supreme People's Court illustrated the importance of the protection of internet intellectual property rights from the perspective of judicial practice, pointed out the legal issues involved in the protection of intellectual property rights in the "Internet Plus" context were basic, fundamental, strategic and leading[®].

On December 2, 2015, the Legislative Affairs Office of the State Council sought public comments for the Revised Draft of the Patent Law of the People's Republic of China (Draft for Review), which specified legal liability of network service providers, and severe punishment on counterfeit patents, improvement of administrative law enforcement measures and establishment of credit information files for patent protection, etc..

6. Regulate legal order of internet finance

In recent years, the rapid development of internet technology has promoted the fast integration of internet and finance, advanced the financing innovation, improved the efficiency of allocation of financial resource, but also brought some new problems and hidden dangers. Among the top ten typical cases of illegal fund-raising in 2015 issued by the leading group office for cracking down on and disposing of illegal fund-raising in Jiangsu, three cases involved in illegal fund-raising via network "P2P"[®].

"E Rent Treasure" fabricated finance lease projects with high interest to absorb a large number of illegal public funds. The accumulative transaction amounts reached more than RMB 70 billion and the actual investment involved was over more than RMB 900,000. The public security organs initiated an investigation on suspicion of illegal fund-raising and adopted compulsory measure for the 21 persons involved mainly in the case[®].

For new problems in the field of internet finance, the relevant national departments continuously strengthened the regulation of the internet finance industry, cracked down on illegal and criminal activities and promulgated the relevant provisions.

On July 18, 2015, the Guiding Opinions on Promoting the Healthy Development of Internet Finance jointly issued by the People's Bank of China and other 9 departments emphasized that, internet finance supervision and administration should be subject to the principle of "lawful, moderate, classified, coordinated and innovative supervision and administration", and scientifically and reasonably defined business scope and access conditions of each type of business, implemented the supervision and administration responsibility, specified the bottom line of risk, protect legitimate business, and resolutely cracked down on breach of laws and regulations[®].

As of December 1, 2015, Kunming and public security organs of other places initiated an investigation on the crime on suspicion of illegal absorption of public deposits made by the FYME Metal Exchange. "Rijinbao", an internet finance product of the Exchange, claimed the annualized rate of 13% and real-time transfer of daily interest settled. It attracted a lot of investors, but it difficult to be honored after maturity. "FYME events" affected 220,000 investors and the amount involved in was RMB 43 billion[®].

http://www.yn.xinhuanet.com/v/2015-12/24/c_134947202.htm.

⁽⁰⁾ State Intellectual Property Office. Supreme People's Court: Strengthen the Protection of Intellectual Property Rights at the "Internet Plus" era [EB/OL] (November 13, 2015) [December 31, 2015]. http://www.sipo.gov.cn/mtjj/2015/201511/t20151113_1202726.html

⁽²⁾ www.sina.com. Jiangsu Published the Top Ten Typical Cases of Illegal Fund-raising in 2015 [EB/OL] (January 21, 2016) [February 15, 2016].

http://news.sina.com.cn/o/2016-01-21/doc-ifxnuvxh5048021.shtml.

^(a) www.news.cn. Fact of the Case of Illegal Fund-raising of E Rent Treasure [EB/OL] (February 1, 2016) [February 13, 2016].

http://news.xinhuanet.com/info/2016-02/01/c_135062174.htm.

[®] Government of China. Guiding Opinions on Promoting the Healthy Development of Internet Finance released by the People's Bank of China and other nine departments [EB/OL] (July 18, 2015) [December 1, 2015]. http://www.gov.cn/xinwen/2015-07/18/content 2899360.htm.

^(s) www.news.cn. Kunming, Yunnan: Public Security Organs Initiated an Investigation on the Case of the FYME Metal Exchange [EB/OL] (December 24, 2015) [December 31, 2015].

On December 28, 2015, the China Banking Regulatory Commission in concert with the Ministry of Industry and Information Technology, the Ministry of Public Security, the State Internet Information Office and other departments studied and drafted the Interim Administrative Measures for the Business Activities of P2P Lending Information Intermediaries (Draft for Comment) and solicited public opinions. The Measures defined the network loan supervision system, the responsibilities of the relevant entities, the business rules for network loans and the risk management requirements, paid attention to strengthening the protection of rights and interests of consumers, specified such requirements as disclosing risks to lenders and means for dispute solution to regulate the business activities of Peer-to-peer ("P2P") lending information intermediaries, promote the healthy development of the P2P lending industry and better satisfy the investment and financing needs of small and micro enterprises, "agriculture, rural areas and farmers", innovative enterprises and the masses.

2.2 Environment for e-commerce talents

2.2.1 Cultivation of e-commerce talents

1. Academic education

Talents are one of the most important core resources for the development of an industry, especially ecommerce industry. New forms, technology, equipment and jobs brought by the "Internet Plus" action requires matching and applicable e-commerce talent training concepts and modes, curriculum development and practical teaching etc., and higher quality of teachers.

In November 2015, the Ministry of Education issued the revised Catalogue of Majors of Higher Vocational Education (Specialty) of Ordinary Institutions of Higher Education (2015) and the Administrative Measures for Setting the Majors of Higher Vocational Education (Specialty) of Ordinary Institutions of Higher Education. The new Catalogue added logistics and e-commerce based on logistics management and engineering, and e-commerce added in the Catalogue of Majors of Undergraduates revised in 2012. ⁽¹⁾ The added majors are mainly those necessary for adapting to the industry transformation and upgrading, extension and overlapping of industry chains, emerging profession and technical progress.

At present, e-commerce talent training academic education includes secondary vocational school, college, university and postgraduate school. In 2015, secondary vocational schools in China had 5.1547 million graduates with the employment rate of 96.3% and the employment (fitting in specialty) rate of 77.60%. Among them, employment rate of the information technology reached 96.85% and the average employment rate of transportation, and financial and commercial specialty over 96.23%. This suggested that the secondary vocational education kept pace with the development of modern service industry and advanced manufacturing industry, and better supported the development of transportation, e-commerce, modern logistics and other new industries.

In May 2015, the National E-commerce Vocational Education and Teaching Steering Committee issued the Brief Introduction of E-commerce Major of Higher Vocational Colleges (Draft for Comment) to strive to resolve such problems as ambiguous direction of introduction and cultivation of e-commerce major, broad courses, extensive but shallow and unprofessional knowledge of the students.

In 2015, 412 universities in China set up e-commerce major, covering all provinces, municipalities directly under the Central Government and autonomous regions all over the country. 19 universities (including one 985 university and eight 211 universities) included e-commerce as an independent major in the catalogue of admission of postgraduates. In order to improve the quality of teaching of e-commerce, the Advisor Committee of Professional E-commerce Teaching of Higher Educational Institutions under Ministry of Education formulated the National Standards for the Quality of Teaching of E-commerce Major, which put forward clear requirements from the applicable scope of majors, cultivation target and specifications, curriculum systems, teaching specifications, teachers, teaching conditions, teaching effect and quality guarantee systems.

2. Social training

The Ministry of Human Resources and Social Security actively updated knowledge of e-commerce practitioners in the "National Knowledge Update Project for Professionals and Technicians" in 2015, successively held over ten senior training classes including "Cross-border E-commerce Innovation and Development" "Research on E-commerce Operating Technology of Small and Medium-sized Enterprises" "Internet Financial Reform, Innovation and Risk" "Construction of Young E-commerce Professionals in Rural Areas".

⁰ Ministry of Education. The revised Administrative Measures for Setting the Majors of Higher Vocational Education (Specialty) and the Catalogue of Majors have been recently released. They were more adaptable to new requirements for the development of modern industry. As a result, majors of higher vocational Education reduced by 423 [EB/OL] (November 10, 2015) [March 26, 2016]. http://www.moe.gov.cn/jybxwfb/s5147/201511/t20151110_218312.html.

To implement the Outline of the National Medium and Long-term Talent Development Program (2010-2020), promote the pragmatic implementation of Knowledge Update Project for E-commerce Talents, the Ministry of Human Resources and Social Security and the Ministry of Commerce established a "national continuing education base for professionals and technicians" in the Training College of China International Electronic Commerce Center to cultivate key high-level and badly needed professionals and technicians in the field of e-commerce. By aggregating the resources of authoritative e-commerce experts from academic, industry and business circles, they established a national-level e-commerce faculty library.

The Training College of China International Electronic Commerce Center has set up 17 branches including Panjin, Yangzhou, Anhui, Xiamen and Tongchuan branches, achieving the requirements for uniform standard, management and certification from such five aspects as the curriculum system, the establishment of the faculty library, the construction of the training base, case library and reference books. In March 2016, according to the comprehensive evaluation, the Training College of China International Electronic Commerce Center appointed 39 persons from the 216 applicants and recommended candidates from government departments, research institutions, industry organizations and well-known enterprises as the first batch of lecturers of the "national continuing education base for professionals and technicians", and cooperated in establishing 20 teaching practice base to provide guarantee for training.

Shanghai Zhangjiang National Innovation Demonstration Zone carried out the pilot construction of an industry-university-research cooperative laboratory for talents cultivation. The industry-university-research cooperative laboratory for cultivation of e-commerce talents declared by Bsteel and the University of Shanghai Science and Technology was included in the pilot enterprise. The laboratory plans to spend three years building a comprehensive laboratory for cultivation of medium and high-level industrial internet talents.

Shanghai "Sanrenxing Class" carried out import and export (especially cross-border e-commerce) training online via QQ group and WeChat, was committed to spread knowledge on freight forwarding, marketing and other aspects in the field of import and export, and sharing of on-the-job experience. Free classes on every Tuesday were well received by the industry and had nearly 5,000 members.

2.2.2Demand for e-commerce talents

In 2015, as continuous promotion of the concept of "Internet Plus" greatly stimulated the development of e-commerce, education, express delivery. intelligent manufacturing and other industries and also brought a large number of employment Internet / Electronics for Employment Research and Znaopuncem Internet/Commerce became an industry with good employment situation (refer Education/training/colleges and universities



Figure 2-1 Top Ten Industries with good employment situation in 2015

The statistical data of www.51job.com showed that, as at December 2015, nearly 670,000 IT employees were recruited in the whole year, with a year-on-year growth of 16.3%. Internet/e-commerce still recruited many employees.

^o Zhaopin.com. Report on Booming Employment Market in China in the Fourth Quarter in 2015 [EB/OL]. (February 1, 2016) [March 26, 2016].

http://www.trainingmag.com.cn/article/articledetails.aspx?ArtId=706671571880.

From the point of industry distribution, internet/e-commerce industry was far ahead no matter in the number of total recruited employees or the year-on-year growth which reached 45%, double that of computer software ranking the second (refer to Figure 2-2) $^{\odot}$.



Total demand in 2015 ('0,000) ____Year-on-year growth rate (%)

Figure 2-2 Total Recruitment Demand and Year-on-year Growth/Decline Rate of the IT industry in 2015

For the demand of top talents, internet/e-commerce ranked only second to the financial sector, but was higher than real estate, professional services, education/training, construction/building materials/engineering, computer software, fast moving consumer goods, trade/import and export, automobile and auto parts and other industries (refer to Table 2-1) [®].

Table 2-1 Ranking of Recruitment Industry of Senior Management Positions in December 2014 and December 2015

Ranking	December 2015	December 2014
1	Finance/investment/securities	Finance/investment/securities
2	Internet/e-commerce	Real estate development
3	Real estate	Internet/e-commerce
4	Professional services (consulting, human resource and accounting)	Professional services (consulting, human resource and accounting)
5	Education/training/colleges and universities	Education/training/colleges and universities
6	Construction/building materials/engineering	Construction/building materials/engineering
7	Computer software	Fast Moving Consumer Goods (Food, beverage and cosmetic)
8	Fast Moving Consumer Goods (Food, beverage and cosmetic)	Automobile and parts
9	Trade/Import and export	Computer software
10	Automobile and parts	Trade/Import and export

Internet/e-commerce is greatly attractive to graduates due to the huge demand and high revenue in the industry. Average annual salary of e-commerce enterprises was over RMB 100,000, that of Taobao plus benefits about RMB 160,000 and that of Jingdong about RMB 120,000. In general, the compensation offered by e-commerce industries for the same post was 30% to 50% higher than that by traditional retailers.

^o www.51job.com. Estimated Rate of Salary Adjustment in High-paying Industries in 2016 [EB/OL] (February 1, 2016) [March 26, 2016]. http://arts.51job.com/arts/05/413758.html.

^(a) www.51job.com. Top Ten Industries Badly Short of Talents Were Released; Headhunters Preferred Talents with High Academic Degrees and Good Performance, Mentality and Reputation [EB/OL]. (February 1, 2016) [March 26, 2016].

http://arts.51job.com/arts/05/413748.html.

2.2.3 Major E-commerce events of national college students

1. The First "Internet Plus" Innovation and Entrepreneurship Competition of College Students

In order to carry out the Implementing Opinions of the State Council on Deepening the Innovation and Entrepreneurship Education Reform in Higher Educational Institutions¹⁰, the first "Internet Plus" Innovation and Entrepreneurship Competition of College Students co-sponsored by the Ministry of Education and the relevant ministries and the People's Government of Jilin Province, and organized by Jilin University was held from May to October 2015. The sponsors took this competition as a good opportunity for deepening the innovation and entrepreneurship education reform, guided various institutions of higher learning in various regions to actively provide services for the innovation-driven development strategy, built an innovative mechanism for talent training, earnestly lifted the innovation spirit, entrepreneurial sense and the innovation and entrepreneurship ability of students in the institutions of higher learning, further brought the innovation and entrepreneurship enthusiasm of students in the higher educational institutions into play, and presented the innovation and entrepreneurship education achievements of the higher educational institutions. ² China's Prime Minister Li Keqiang made important instructions on the first "Internet Plus" Innovation and Entrepreneurship Competition of College Students, emphasizing the inclusion of the innovation and entrepreneurship education in the talent training, and provide more fertile ground for the public to start businesses and make innovations. Liu Yandong attended the relevant events and gave a speech, while the Minister of the Ministry of Education Yuan Guiren announced the final prize owners. A total of 200,000 college students from more than 1,800 higher educational institutions and classified into more than 57,000 teams took part in this Competition, and led millions of students to engage in it. A total of 300 teams which excelled from the preliminary contest at the school level and the semi-final contest at the provincial level got to the final. Eventually, among those 300 teams, 34 teams were awarded the Gold Medal, and 82 teams the Silver Medal.

2. China National College Student "Innovation, Originality and Entrepreneurship" Challenge

The China National College Student "Innovation, Originality and Entrepreneurship" Challenge is a national competition sponsored by the Ministry of Education's Steering Committee on the Teaching of E-commerce in Higher Educational Institutions, and organized by the Organizing Committee of the Innovation, Originality and Entrepreneurship Challenge, the National Final Contest Organizer, the Provincial Tryout Organizer and the participating schools.

The Fifth China National College Student "Innovation, Originality and Entrepreneurship" Challenge took nine months after being launched in Chengdu on November 15, 2014. The national final contest was held in Chengdu on August 22, 2015. A total number of 12,143 teams from 932 colleges and universities in 29 provinces participated in this Challenge, hitting an all-time record. There were about 1,000 teachers and students classified into 158 teams from Chengdu University of Technology, Xi'an Jiaotong University, University of International Business and Economics, Central China Normal University and other higher educational institutions passing the initial selection of schools and the tryouts at the provincial level, and more than 100 experts and professors for review and guidance of this Challenge.

In the morning of October 27, 2015, the sixth China National College Student "Innovation, Originality and Entrepreneurship" Challenge was officially launched in the New Silk Road International E-commerce Industrial Park, Xi'an International Trade and Logistics Park. The national final contest will be held in Chengdu in the late of July 2016.

3. "E-commerce Skills" Contest of Vocational Groups under National Vocational Students Skills Competition

^o General Office of the State Council. Opinions of the State Council on Deepening the Innovation and Entrepreneurship Education Reform in Higher Educational Institutions [EB/OL](May 13, 2015)[March 26, 2016]. http://www.gov.cn/zhengce/content/2015-05/13/content_9740.htm.

[®] Ministry of Education. Circular of the Ministry of Education on Holding the First "Internet Plus" Innovation and Entrepreneurship Competition of College Students [EB/OL](June 2, 2015)[March 26, 2016].

http://www.moe.edu.cn/srcsite/A08/s5672/201506/t20150602_189532.html.

In July 2015, the "E-commerce Skills" Contest of Vocational Groups under National Vocational Students Skills Competition took place in Tianjin College of Commerce. 29 provinces, autonomous regions and municipalities directly under the Central Government organized the tryouts respectively, and finally chose 77 teams and 308 players to participate in this national contest.

This contest was mainly divided into three competition sections such as opening and decoration, customer services and marketing and business analysis with the performance of such four key tasks as the opening and decoration, operation and marketing, network customer services and operation analysis of online shops and the professionalism of players as the contents by employing an advanced e-commerce network simulated training mode. During this contest, the participating teams opened online shops, analyzed data, lease office space and establish distribution centers as sellers.

This contest improved the commodity integration ability, online marketing ability, customer service ability, online shop operation ability, big data analysis ability and teamwork ability of students in higher vocational and technical colleges, enhance their innovation and entrepreneurship competence in the E-commerce field, and promote the combination of higher vocational education and practice in E-commerce.

4. First China National College Students Cross-border E-commerce Innovation and Entrepreneurship Competition

The First China National College Students Cross-border E-commerce Innovation and Entrepreneurship Competition took almost seven months after being launched in the Beijing's Great Hall of the People on April 27, 2015, and came to a successful end in the Tsinghua University on November 14, 2015. This competition was sponsored by the chamber of commerce consisting of nearly one hundred of shopping districts, and about a thousand of enterprises took on the relevant work. All of this helped college students make innovation and business startup practicably and efficiently.

During this contest, cross-border e-commerce enterprises joined by students had a total turnover of more than USD 0.1 billion; single enterprise exports were up to USD 1.5 million with the biggest export of single month reaching USD 840,000; the team with businesses independently handled by students had a maximum turnover of USD 90,000 in a single month; 300 enterprises reached a preliminary employment agreement with about 500 students, accounting for nearly 20% of the total number of participants; and over 200 students with clear intention for business startup represented 7% of the total number of participants. A preliminary goal has been achieved in in-depth interaction between the education and the industry, and win-win for students and enterprises.

5. College Students Bulk Commodity Trading Contest

On April 20, 2015, the Third "Yongshangsuo Cup" College Students Bulk Commodity Trading Contest was launched. This eight-week contest has attracted 6,800 college students with the relevant major from eight higher educational institutions to sign up for and participate in it. This contest enhanced the bulk commodity trading and investment skills and the innovation and entrepreneurship practice ability of college students, and facilitated the improvement of the teaching quality and the reform of the talent training mode.

2.2.4E-commerce talent training trend

1. The training of skilled E-commerce talents will be raised to a new level.

With the growing demand for skilled E-commerce talents, the relevant training task is becoming increasingly urgent.

In terms of academic education, higher vocational and technical colleges and application-oriented universities will assume more responsibilities for skilled E-commerce talent training. In 2015, Shanghai developed the Circular on Issuing the Planning of Shanghai Municipality on the Construction of the Modern Vocational Education System (2015-2030), which included the E-commerce major in the list of the second batch of the pilot professions of Shanghai Municipal higher educational institutions and application-oriented universities, reflecting the trend of the education reform. The Advance the "Innovation, Entrepreneurship and Maker" Action, and Accelerate Training the E-commerce Talents Adapted for the Requirements of "Internet Plus" released by the National E-commerce Vocational Education and Teaching Steering Committee will become the business guidance for the E-commerce talent training of all the higher educational institutions. In the future, all the provinces and cities will accelerate the reform of the E-commerce application-oriented talents and the building of the application-oriented professions, leading to the improvement in the training of students with such subdivided professions as E-commerce logistics, network customer service, networking marketing class, online shops (website) design, data analysis and online shop operation.

In terms of on-the-job training, the department in charge of this industry will put more efforts in the onthe-job training. The Ministry of Commerce will stick to the rural E-commerce training for the national Ecommerce demonstration counties; and the Ministry of Human Resources and Social Security will continue to promote E-commerce practitioners to update their knowledge. Local governments will, in combination with public entrepreneurship and innovation, speed up the training of E-commerce innovation and entrepreneurship talents; and apply various resources to improve the E-commerce skills and marketing level of in-service staff of enterprises to promote the local E-commerce development at the same time. All kinds of social training institutions will also bring forth new training methods, and innovative training methods, and use network medium to raise the E-commerce business training level and attractiveness more often.

2. More attention paid to the E-commerce entrepreneurs training

The Opinions of the State Council on Several Policy Measures for Vigorously Promoting Public Entrepreneurship and Innovation clarified that ⁽ⁱ⁾China will give more support to public entrepreneurship and innovation in the aspect of E-commerce. Governments at all levels will include entrepreneurship cultivation and entrepreneurship education for all-round development in the national education system to foster a mechanism or system for the society entrepreneurship curricula designing, and strengthen the building of the entrepreneurship training system. They will enable public entrepreneurship and innovation to be deeply rooted among the people by popularizing the relevant knowledge, and provide better entrepreneurship services by establishing an excellent team of entrepreneurship mentors. Through the innovation and entrepreneurship education, a large number of E-commerce professionals having entrepreneurial spirits and taking risks will stand out so as to ensure the sustained and rapid development of the E-commerce in China.

In April 2015, the National "Innovation and Entrepreneurship" Guidance Meeting for E-commerce Practitioners was convened in Hebei Normal University. With the aid of the platforms and resources of the National E-commerce Applied Talents Training Project, this meeting aimed to cultivate new E-commerce talents capable of promoting and implementing the "public entrepreneurship and innovation" project with the E-commerce mean so as to boost entrepreneurship and employment. Shanghai Jiao Tong University set up the entrepreneurship college, Heilongjiang University established the innovation and entrepreneurship practice base, and the entrepreneurship class of the University of Shanghai Science and Technology had three generations of graduates. 2016 will see more schools get into the E-commerce entrepreneurship education field and work together with enterprises to set up E-commerce practice bases to provide services for students to make innovation and entrepreneurship practice.

3. The case teaching will play an important role in the E-commerce talent training

E-commerce is a highly interdisciplinary and comprehensive discipline, and the case teaching on Ecommerce has an important role in the E-commerce talent cultivation. With the rapid development of Ecommerce comes continuous innovation in the E-commerce business models and operation models, which provide a plenty of case materials for the E-commerce talent cultivation.

In order to better improve the case teaching quality of the E-commerce major in colleges and universities nationwide, the E-commerce case team of the Ministry of Education's Steering Committee on the Teaching of E-commerce in Higher Educational Institutions, by developing the working plan on the "Investigation and Survey on E-commerce Cases and Promotion of Industry-University-Research Cooperation", aimed to establish a long-term mechanism for cooperation between the Steering Committee on the Teaching of E-commerce, and the relevant governmental E-commerce departments, the E-commerce industry association and domestic and international model enterprises in E-commerce: build a stable partnership with E-commerce enterprises, and follow up, investigate and summarize such contents as business models, operation management and development strategies of the model Ecommerce enterprises; create database for typical cases in E-commerce, and build a service platform for the E-commerce cases network teaching of the Steering Committee on the Teaching of Ecommerce in Higher Educational Institutions; collect the achievements of goods cases, and publish the Typical Cases on E-commerce in China; and organize the E-commerce cases teaching symposium at all levels, and analyze, summarize and disseminate the case teaching experiences. According to the actual needs of the society and the successful analysis on cases, the E-commerce research resources and results were collected to press ahead with the industry-university-research cooperation.

2.3 E-commerce investment and financing environment

2.3.1 Investment in the E-commerce industry

According to the statistics of Zero2IPO Group [®], in 2015, China angel investment institutions invested in a total number of 2,075 cases with the disclosed amount of more than RMB 10,188 million. Specifically, the internet industry had 1,030 cases receiving angel investment with the investment

^(a) The State Council. Opinions of the State Council on Several Policy Measures for Vigorously Promoting Public Entrepreneurship and Innovation [EB/OL](June 16, 2015) [March 26, 2016]. http://www.gov.cn/zhengce/content/2015-06/16/content_9855.htm.

[©] Zero2IPO Research Center. 2015 China Equity Market Review and Outlook [EB/OL](January 22, 2016) [April 23, 2016].

http://www.useit.com.cn/thread-11271-1-1.html.

amount totaling RMB 5,100 million,

, which were far more than those of any other industry. It was the one with the most cases and the biggest investment amount in the China angel investment market in 2015. (see Figure 2-3).



Figure 2-3 Number of cases and amount of investment of different industries in China angel investment market in 2015

Source: Zero2IPO Research Center

The internet industry was also the one with the most cases and the biggest investment amount in the China venture capital investment market in 2015. In 2015, China venture capital market had 3,445 investment cases in total, of which, the disclosed amount was RMB 129,334 million. Specifically, the internet industry topped the list with1,051 investment cases and the amount of RMB 39,694 million (see Figure 2-4).



Figure 2-4 Number of cases and amount of investment of different industries in China venture capital investment market in 2015

Source: Zero2IPO Research Center

In the private equity market, the internet industry was among the front-runners in terms of the number of cases and amount of investment. In 2015, China private equity market had 2,845 investment cases in total, of which, the disclosed amount was RMB 385,974 million. The internet industry ranked the first with 481 investment cases; and the second with the investment amount of RMB 52,421 million (see Figure 2-5).



Figure 2-5 Number of cases and amount of investment of different industries in China private equity investment market in 2015

Source: Zero2IPO Research Center

2.3.2M&A in the E-commerce industry

According to the statistics, 23 primary industries such as IT, Internet, biotechnology/healthcare, finance and machinery manufacturing were involved in the China M&A market in 2015 $^{\odot}$ (See Table 2-2). In terms of the number of M&A transactions, the top three prizes went to the emerging industries. IT and the Internet industries have experienced explosive growth in previous years, and ushered in the shuffle in 2015, while the leading enterprises aggressively made overall arrangement for the chains upstream and downstream, making these two major industries consistently rank the top two in terms of the number of M&A projects. In 2015, IT and the Internet industry had 352 and 304 M&A cases respectively, accounting for 13.1% and 11.3% of the total number of cases.

In terms of the amount of M&A, there were two main factors affecting the distribution of the amount in the industries in 2015: one is consolidation of powerful enterprises, and the other is backdoor listing. In 2015, the internet industry saw more reshuffle and consolidation of powerful enterprises. In the eretailing industry, Alibaba became the second largest shareholder of Suning with an investment of about 28.3 billion in Suning Commerce, while Suning Commerce subscribed no more than 27.8 million newly issued shares of Alibaba at a consideration of RMB 14 billion. The combination of Alibaba and Suning Commerce affected the overall pattern of the domestic B2C e-retailing market; JD.com entered into a strategic partnership with Yonghui Superstores, in which, JD.com will make strategic investment in Yonghui Superstores. It is JD.com's first time to invest in the large-scale supermarket chain, and cooperate with the offline leading retailer. In the network services industry, Didi Chuxing and Kuaidadi announced an official consolidation by the exchange of 100% shares, and became the biggest service provider in the network-based auto service industry. Dianping.com and Meituan.com adopted a Co-CEO mechanism, and constituted the new "giant" with a market share of 80% in the group-buying industry. Ctrip and Baidu have concluded an equity replacement transaction, in which, Baidu will own Ctrip's common shares representing about 25% of the total voting rights, and Ctrip will own approximately 45% of the total voting rights of Qunar.com. In 2015, the internet industry topped the list with the M&A transaction amount of RMB 145,566 million. Four of the top ten M&A transactions were made in the IT and the Internet industry.

^o Zero2IPO Research Center. Zero2IPO statistics: The Scale of M&A Transactions Hit a New Record with the Acceleration of the Emerging Industry Consolidation in 2015 [EB/OL](January 18, 2016) [March 26, 2016].

http://research.pedaily.cn/201601/20160118392628.shtml.

Industry	Number of cases	Proportion (%)	Number of cases	M&A amount (RMB 00,000,000)	Proportion (%)	Average M&A amount (RMB 00,000,000)
IT	352	12.1	245	461.52	4.4	1.31
Internet	304	11.3	235	1455.66	13.9	4.79
Biotechnology / Healthcare	239	8.9	226	665.97	6.4	2.79
Finance	220	8.2	184	1079.34	10.3	4.91
Machinery manufacturing	193	7.2	179	362.54	3.5	1.88
Electronic and photoelectric equipment	155	5.8	134	354.21	3.4	2.29
Real estate	148	5.5	135	1302.65	12.5	8.80
Clean technology	135	5.0	134	520.75	5.0	3.86
Energy and mineral resources	126	4.7	119	540.27	5.2	4.29
Entertainment and media	109	4.0	98	880.01	8.4	8.07
Telecommunications and value-added services	102	3.8	85	307.20	2.9	3.01
Construction/engineering	95	3.5	92	232.21	2.2	2.44
Chemical raw materials and processing	86	3.2	79	181.15	1.7	2.11
Automobile	63	2.3	61	909.51	8.7	14.44
Chains and retail	58	2.2	48	298.05	2.9	5.14
Food & beverage	57	2.1	53	134.89	1.3	2.37
Logistics	36	1.3	32	207.56	2.0	5.77
Agriculture/forestry/animal husbandry/fishery	35	1.3	31	46.32	0.4	1.32
Textiles and apparel	22	0.8	19	42.26	0.4	1.92
Semiconductor	16	0.6	15	96.04	0.9	6.00
Education and training	11	0.4	8	19.25	0.2	1.75
Radio and television and digital TV	10	0.4	8	14.19	0.1	1.42
Others	120	4.5	98	325.69	3.1	2.71
Total	2692	110.0	2318	10437.25	100.0	4.50

Table 2-2 Industry distribution in the China M&A market in 2015

Source: Pedata. January 2016

2.3.3Listing of the E-commerce enterprises in the National Equities Exchange and Quotations (NEEQ)

As at December 31, 2015, there have been 5,138 enterprises listed in NEEQ, breaking the record of 5,000 enterprises[®].

In 2015, there were 3,557 enterprises newly listed in the NEEQ, 2.3 times the total number of the previously listed enterprises. More and more enterprises, securities traders, investment institutions, banks, medium and other industries are flooding into the market, in which, the development of the E-

[®] CNFOL. December: The Number of the Listed Enterprises in NEEQ surged to the highest level, and the Temporary Suspension of Trading the Shares of PE institutions Triggered Concerns

[[]EB/OL](January 16, 2016) [April 5, 2016].

http://sc.stock.cnfol.com/gppdgdzx/20160116/22122221.shtml.

commerce industry attracted most attention.

In December 2015, the enterprises listed in NEEQ came from 28 primary industries. From the perspective of the total number, the machinery manufacturing, IT and Internet industries were the top three with 153 enterprises, 120 enterprises and 56 enterprises listed in NEEQ respectively; accounted for 20.51%, 16.09% and 7.51%; The machinery manufacturing, IT and Internet industries were the top three supported by VC/PE with 44 enterprises, 39 enterprises and 26 enterprises listed in NEEQ respectively; accounted for 22.34%, 19.80% and 13.20% (refer to Figure 2.6); From the perspective of the amount of the raised funds, there was a total amount of RMB 11,341 million raised from private placement in NEEQ through the issuance of 2,325 million new shares. Specifically, in terms of the amount of the raised funds, the top three industries were the finance, IT and machinery manufacturing industries with RMB 1,325 million, 1,205 million and 1,180 million respectively, accounting for 11.7%, 10.6% and 10.4%⁽⁰⁾.



Figure 2-6 Distribution of the Enterprises Listed in NEEQ in December 2015

Source: Pedata. January 2016

2.3.4Trend of Investment and Financing in the E-commerce industry

1. Innovate the financing models: from asset-heavy strategy to asset-light strategy

The Internet finance companies innovated the financing models by shifting from the asset-heavy strategy to the asset-light strategy according to the status on the financing difficulty of small and medium-sized E-commerce enterprises. For example, the "TRJCN.com" has successfully made capital connection involving One Hundred Billion Yuan online and offline in virtue of a standardized plus personalized service system. In 2016, there will be more investment and financing institutions learning to shift from the asset-heavy operation, which they get used to and are good at, to the asset-light operation according to the trend of the changes in China's economic structure.

2. Further broaden the financing channels

At present, the e-commerce industry in China has three main financing methods: acquisition of venture capital, realization of IPO and The funds are mainly from venture investment. Specifically, most funds are from the PE (private equity), VC (venture capital) and network-based financing, and a small portion of funds from bank credit and IPO listing financing. From the view of the size of the financing, the financing channels are still relatively narrow so that it is difficult to meet with the funding needs of various e-commerce enterprises. To broaden the sources and channels of funds is an important measure for the future e-commerce development. As overseas financing is an important way for China's e-commerce enterprises to make financing, more and more e-commerce enterprises want to have the opportunity to get investment from overseas investment companies and be listed overseas.

3. Gradually promote the equity financing in the e-commerce industry

For the financing model, the financing model of the e-commerce enterprises has gradually transformed from the one dominated by such indirect financing as bank credit to the one with both direct financing and indirect financing, and especially the proportion of the equity financing in the direct financing was greatly improved. For instance, in the platform of "TRJCN.com", above 50% projects are made mainly through the equity financing. Moreover, with the advent of the "Internet Plus", the number of the equity

[©] Zero2IPO Research Center Zero2IPO statistics: December: The Number of the Listed Enterprises in NEEQ surged to the highest level, and the Temporary Suspension of Trading the Shares of PE institutions Triggered Concerns [EB/OL](January 15, 2016)

[[]March 26, 2016]. http://research.pedaily.cn/201601/20160115392571.shtml.

financing shows an upward trend on a year-on-year basis⁽⁰⁾.</sup>

In recent years, China's commercial banks began to pay attention to the investment in the e-commerce industry by establishing science and technology branches, improving the traditional credit management system, strengthening the ability of the risk control against small and medium-size e-commerce enterprises, and increasing support for e-commerce enterprises. All of these measures help to optimize the financing environment of small and medium-size e-commerce enterprises and promote their sustainable development.

[©] TRJCN.com. TRJCN.com: Trend of the Reform in the Investment and Financing Field in 2016 [EB/OL](December 24, 2015) [March 26, 2016]. http://pe.hexun.com/2015-12-24/181400646.html.

2.4 E-commerce credit environment

2.4.1 The construction of the social credit environment has been effectively improved

1. The construction of the credit system has been elevated to the national level

In March 2015, when visiting the State Administration for Industry and Commerce, Premier Li Keqiang made important instructions, emphasizing to organize a project similar to the information system of customs and taxation and form a national unified big data platform for publicizing enterprise information to improve the enterprise credit information sharing mechanism, and explore new regulatory models to bring the market supervision system into full and better play. The national industry and commerce departments are promoting the construction of the national enterprise credit information publicity system, known as "one web for the whole country", which will become an important source of enterprise credit information.

In July 2015, the General Office of the State Council released the Several Opinions on Strengthening the Service for and Supervision of Market Subjects by Applying Big Data. These Opinions, relying on the national unified sharing credit information sharing platform, propose to build a fair and honest market environment by applying big data to advance the construction of the social credit system and setting up a credit linkage incentive mechanism across regions and departments.

In July 2015, the Guiding Opinions on Promoting the Healthy Development of Internet Finance released by the People's Bank of China and other nine departments proposed to: promote the construction of credit infrastructure, and foster Internet Finance supporting service systems. Infrastructure construction in the areas of technology such as big data storage, network and information security maintenance shall be supported. Employers are encouraged to establish a credit information sharing platform in accordance with the law. The related employers are promoted to access the basic financial credit information database. Qualified employers shall be allowed to apply for credit investigation business permission. The qualified credit intermediaries are given support to conduct credit ratings of internet companies.

In September 2015, the Opinions of the General Office of the State Council on Promoting Online and Offline Interaction to Accelerate the Innovative Development, Transformation and Upgrading of Commerce Circulation clearly indicated to: drive the construction of the social credit system, strengthen the public disclosure of the information of business objects, and promote the publicity of the information on the administrative licensing and the administrative penalties within 7 working days on the internet. The e-commerce credit records shall be established and improved, and included in the "creditchina.gov.cn" website and a unified credit information sharing and exchanging platform to perfect the e-commerce credit management and information sharing mechanism.

In September 2015, the State Council published the Guiding Opinions on Accelerating the Construction of Supporting Platforms of Public Entrepreneurship and Innovation, which proposed to: innovate methods for industrial supervision, set up the new market supervisory mechanism with the credit as a core and strengthen cross-departmental and cross-regional coordinated supervision; establish and perfect interim and ex-post supervision systems, give full play to the role of the unified national credit information sharing and exchange platform, the enterprise credit information publicity system and others, and make use of methods such as big data, random check and credit assessment to strengthen the supervision and inspection as well as the disposal of violations of laws and regulations.

2. The social concern about the credit ran unprecedentedly high

The national enterprise credit information publicity system has been put into operation in February 2014. The main contents of the publicity include: registration of market subjects, licensing and examination and approval, annual reports, administrative penalties, sampling results, abnormal business status and other information. At present, enterprises gradually accepted and actively participated in the information publicity, and showed growing willingness to form their credit record through the information publicity.

As at June 30, 2015, there were 12,190,300 enterprises nationwide publicizing their 2013 annual reports, and 14,824,900 enterprises publicizing their 2014 annual reports, resulting in the annual reports publicity rate to reach 87.55% and 85.12%. These statistics reflect that a considerable number of enterprises began to pay attention to the accumulation of their own credit, and publicize all of part of the information which are not required to be publicized according to the Interim Regulations on

Enterprise Information Publicity.

The data shows that the number of such enterprises accounts for 52.69% and 50.15% of the number of the enterprises with annual reports respectively in 2013 and 2014 $^{\circ}$. As at February 22, 2016, the number of the daily average "page views" has been close to 16 million $^{\circ}$, which reflected that the public paid high attention to the credit of enterprises.

The credit constraints are mainly showed by including certain enterprises in the directory of enterprises with abnormal business or the list of enterprises with serious illegal behavior. As at July 14, 2015, there have been 2,840,100 subjects included in directory of enterprises with abnormal business nationwide, representing 12.38% of the total number of actual subjects.

Wherein there were 2,585,900 enterprises with abnormal business, accounting for 91.05%. Among those subjects with abnormal business, the number of the enterprises, which were removed from the directory of enterprises with abnormal business after fulfilling publicity obligations or correcting their wrong actions, amounted to 125,700, accounting for 4.43%.

3. The phenomenon of the credit island has been effectively improved

Currently, the sharing and disclosure of the enterprise credit information of the management departments has been initially achieved. In June 2015, under the support and guidance of the National Development and Reform Commission and the People's Bank of China, the "creditchina.gov.cn" website sponsored by the State Information Center was officially launched. This website has collected more than 14 million pieces of information which can be publicized from the Supreme People's Court, the National Development and Reform Commission, the Ministry of Finance, the Ministry of Agriculture, the Ministry of Environmental Protection, the State Administration of Taxation, the State Administration of Work Safety, the China Securities Regulatory Commission and other departments, including the list of dishonest persons subject to enforcement ("deadbeats") provided by the courts, and the list of the parties concerned in major taxation offence cases provided by the tax departments.

In addition, the departments of transportation, environmental protection, commerce, customs, taxation, quality inspection, food and drug administration, safety supervision and tourism and other departments have established the credit classified regulation system or serious dishonesty blacklist system. With years of efforts of the governments, the national enterprise credit information publicity system of the State Administration for Industry and Commerce, the national information verification system for code allocation to organizations of the bureau for code allocation to organizations, the shixin.court.gov.cn website of the Supreme People's Court, a series of "creditchina.gov.cn" vigorously promoted by the National Development and Reform Commission, and all the credit websites in different regions have made all the enterprise credit information available to the public for free inquiry so as to further facilitate the transparency of the enterprise credit information.

4. The credit service market flourishes gradually

By 2015, China's credit services have covered major sectors of the national economy, including commerce, animal husbandry, agriculture, steel, light industry, real estate, food processing, e-commerce, Internet services and other industries. The varieties of credit products have been growing. In addition to the traditional e-commerce credit certification and the Trusted Site Certification, dozens of credit varieties have emerged in this field, and included the credit website certification, the Internet plus innovation competitiveness credit enterprise certification, the business credit certification in the financial sector, China supply chain finance enterprises credit certification, real-name authentication, real-name verification, Trade2CN certification and e-commerce operators certification.

According to the statistics of the People's Bank of China, there were 107 enterprise credit agencies nationwide registered in 2015, with 40 agencies in Beijing and 22 agencies in Shanghai. In recent

⁽⁰⁾ The State Administration for Industry and Commerce and the State Administration for Industry and Commerce held a Conference on the Construction and Operation of the National Enterprise Credit Information Publicity System [EB/OL](September 23, 2015)

[[]March 26, 2016].

http://www.scio.gov.cn/XWFBH/GBWXWFBH/XWFBH/GSZJ/document/1449957/1449957.htm.

[®] State Administration for Industry and Commerce. Nearly Sixteen Million Page Views in the National Enterprise Credit Information Publicity System Per Day [EB/OL](February 3, 2016) [March 26, 2016]. http://www.scio.gov.cn/video/qwjd/34146/Document/1469550/1469550.htm

years, the overall market demand of enterprises for the third-party credit services has been on the rise. With respect to the China's business credit platforms, the number of enterprises applying for real-name authentication of products through the network was 556, 330, 330, 1,642 and 2,936 respectively from 2011 to 2015. The social credit consciousness has improved significantly, and the number of enterprises actively increasing credit for them has been growing.

Shanghai, as one of the most economically, politically and culturally developed regions in the country, took its place in the front ranks of the country in the construction of the social credit system.

At present, Shanghai has formed a public credit information service platform based on the crossdepartmental information systems such as the municipal legal person library and the actual population library, which collected the information of 99 units (including 46 administrative organs at the city level, 17 governments of the districts and counties, 10 central units in Shanghai, two people's organizations, one judicial authority, ten utilities and 13 social organizations), covering 3,444 items of matters such as the registration information, qualification information and regulation information of the administrative organs, the judicial decision information and enforcement information of the judicial bodies, the default information of the utilities, the administration information and the public benefit information of the people's organizations and other organizations, 10.46 million pieces of searchable legal person data and 300 million pieces of natural person data involving 1.38 million legal persons and 2,400 natural persons. That information provided the government departments with the credit services data support in the information sharing and the collaboration demands of the daily supervision, comprehensive control, joint law enforcement, administrative examination and approval and other work.

2.4.2New progress has been made in the E-commerce credit environment

1. The growth rate of online shopping complaints maintained at a lower level

The data from the China Consumer Association indicated that, in 2015, the National Consumers Association Organization received 20,083 complaints for long-distance shopping with the number of complaints for online shopping accounting for 95.41%, a slight increase of 3.13% over the previous year and far lower than the growth rate of the e-retailing sales of the year. In the long-distance shopping, the consumers' complaints mainly related to the e-commerce, WeChat business, TV shopping and other aspects. The problems for which the e-commerce is complained include: first, there existed a lot of substandard and counterfeit goods; second, it was difficult to implement the policy of seven-day return of goods without any reason; third, consumers' personal information was leaked; and fourth, it was hard to ensure the safety of online payment. In recent year, the WeChat business has become an emerging online trading model with the rapid development, but there were still many problems as most of WeChat businesses are trading behaviors between individuals, and have not brought under supervision of the government for too long: first, there is lack of credit guarantee system for WeChat businesses, for example, in the event of consumption disputes, it is difficult for consumers to safeguard their rights and interests; second, there are false propaganda behaviors in WeChat businesses due to inconsistence between physical goods and goods in advertisements; and third, the promises of WeChat businesses about the activities such as "thumb-up" are often overstated.

2. The network-based consumer credit was sprouting

Major e-commerce platforms have launched their own consumer credit products, such as JD Baitiao, Ant Check Later, Mocu Street Maibei and Suning Renxingfu. JD Baitiao means that if a consumer shops at JD.com, he/she may make payments by applying for personal loans up to RMB 15,000 and making installment repayments within 3-24 months. Ant Check Later is a consumption loan, and its funds are from Alibaba MicroCredit Co., Ltd. In general, the entire payment process is that the e-commerce platforms make payments to the merchants, and then the consumers make repayments to such platforms within the repayment period. These consumer credit products have been very popular among net citizens once they were launched. According to the data of Ant Financial, in 2015, the Ant Check Later participating in "Double Eleven" for the first time made 60.48 million deals in a day with the payment success rate reaching 99.99%^①.

3. The credit online and offline is increasingly integrated

With the establishment of the big data technology of the national credit system, the situation on enterprise or personal credit will gradually develop in the direction of multi-dimensional perspective. The credit information in the e-commerce platforms is gradually connected with the offline credit system.

For personal credit, in January 2015, China's first personal credit score-Zhima Credit Scores launched by Alibaba's Zhima Credit moved into the beta stage. By analyzing the data on the users' behavior trace, and using the data analysis model to estimate their credit rating, the Zhima Credit Score can

⁽⁰⁾ Ecns.cn. Ali's Ant Financial Recorded a Total of 710 million Payments in "Double Eleven" in a Single Day [EB/OL](November 12, 2015) [March 26, 2016].

http://www.chinanews.com/IT/2015/11-12/7618485.shtml.

enable the credit rating to cover more groups than the previously used traditional credit investigation method. It is a beneficial supplement to the existing e-commerce credit rating system.

Similarly, Taobao credit rating formed its own rating, while JD Baitiao's line of credit went varies based on different personal online credit. These online credit ratings are connecting with the personal credit rating of banks to shape into a credit system with support from both online data and offline data.

Chapter 3 Special Report on the Development of the E-commerce Service Industry

The e-commerce service industry refers to a collection of enterprises providing various services for ecommerce activities, mainly including e-commerce platform services, e-commerce support services and derived e-commerce services. As an important part of the e-commerce industry, the e-commerce service industry is playing an increasingly important role in promoting the construction of the "Internet Plus" action plans and "One Belt One Road". This special report comprehensively reflects the overall development and the latest progress in the market segments of the e-commerce service industry in China in 2015.

3.1 Overview of the development of the e-commerce service industry

3.1.1The growth of the market size accelerated

In recent years, along with the expanding of the leading enterprises in the scope of services, the increase in the number of types of value-added services and the rise of O2O services, the size of the e-commerce service system maintained at a relatively high growth. CCID Consulting's data shows that in 2015, the size of the e-commerce service industry in China was RMB 1.98 trillion, a growth rate of 58.4% compared with 2014 (See Figure 3-1)





Source: CCID Consulting

As a global leader in the e-commerce services field, in 2015, Alibaba's e-commerce service market continued to accelerate growth with the growth rate of the market size increased from 61.9% in 2012 to 78.8% in 2015, which exceeded the growth rate of 60% for four consecutive years. Chart 3-2 reflected the faster growth in the market size of Alibaba's e-commerce service industry from 2011 to 2015[®].

^o Ali Research Institute. White Paper on Alibaba's Business Services Zoology (2016)[R/OL](2016 03 04)[2016 03 26]. http://m.taohua.com/markets/fuwu/report#part-one.



Chart 3-2 Growth in the Market Size of Alibaba's E-commerce Service Industry from 2011 to 2015

Source: Ali Research Institute. The E-commerce Research Institution of the University of Shanghai Science and Technology

The e-commerce service industry saw the size of the transaction service application market grow rapidly. Customer service outsourcing, photography, consulting services, recruitment, training, quality inspection and control and customized design have become new growth points for the scale of the e-commerce service industry. The courier service businesses continued to maintain a rapid development. As the courier service enterprises in China delivered a total number of 20.67 billion packages, up 48% on a year-on-year basis, China maintained the world's first express power status. The mobile e-commerce services developed rapidly. During the "Double Eleven" period, the amount of the wireless transaction was RMB 62,642 million, accounting for 68.67%. The cloud services continued to develop. There were over 2,000 SaaS service providers in China, widely distributed in the retail, finance, digital entertainment, health care and other industries. Alibaba, Tencent, Baidu and other service providers will develop cloud computing as a strategic business. Alibaba became the global cloud computing service provider with the faster growth rate in the operating revenue than Amazon and Microsoft. In "Double Eleven" Shopping Festival, 85,900 deals per second were made at the peak of that day. This figure was higher than the biggest handling capacity of PayPal, setting a historical record.

3.1.2The objectives structure was constantly optimized

In 2015, the e-commerce service industry in China continued to optimize the structure of objectives mainly in three aspects, namely, service contents, sectors and scope. The services were changed from basic and single services to customized and integrated services, and many e-commerce enterprises providing one-stop services were on the rise. In the service sectors, the e-commerce service enterprises independently engaged in agricultural products, tourism products and other industries arose. In terms of the scope of services, the e-commerce enterprises gradually developed into the national and integrated e-commerce enterprises from serving cities and certain regions to serving the country, villages, different regions and internal market.

In terms of the proportion of the market share of the e-commerce platforms in China in 2015, Ali (Taobao, Tmall and Alibaba B2B platform) stayed at the first place by virtue of its user base and rich industry experiences and with the assistance of big data and other advanced technologies. Ali's total market share reached 59.7%, followed by JD.com with 25.1%, and there was more intense competition among other enterprises (see Figure 3-3).



Chart 3-3 Pattern of the E-commerce Service Providers in China in 2015

Source: CCID Consulting

According to the data of Ali Research Institute, the growth rate of the number of the active service providers participating in Alibaba's business ecosystem increased from 1.8% in 2012 to 33.5% in 2015, and maintained a momentum of rapid growth (see Figure 3-4) ^①. By 2015, there have been more than 10 service providers with annual income of over RMB 100 million, and dozens of service providers with annual income of over RMB 10 million. Many enterprises have gone public, and some of them have secured financing of over RMB 10 million.



Year 2011 Year 2012 Year 2013 Year 2014 Year 2015

Chart 3.4 Fast Growth in the Number of Active Service Providers in Alibaba's E-commerce from 2011 to 2015

Source: Alibaba

Geographically, the rapid development of the e-commerce service industry in China concentrated in the coastal cities. Among them, Zhejiang, Beijing, Shanghai, Guangdong and Fujian were among the best in the development of the e-commerce service industry; Guangdong Province had the biggest number of service providers; the service providers were most densely distributed in Beijing and Shanghai; and in Zhejiang Province, the average individual service provider performed the best in the market. In addition, Chengdu, Wuhan, Xiamen, Suzhou, Jinhua, Xi'an, Nanjing, Jinan, Zhengzhou, Shijiazhuang and other cities had become the gathering place for regional service providers, leading to the development of regional e-commerce.

As at March 2015, China has had 510 e-commerce industrial parks $^{\circ}$, including more than 20 cross-border e-commerce industrial parks .

^o Ali Research Institute. White Paper on Alibaba's Business Services Zoology (2016)[R/OL](March 4, 2016)[March 26, 2016]. http://m.taohua.com/markets/fuwu/report#part-one.

[©] Ali Research Institute. Report on the Development of E-Commerce Parks in China (2014 2015)[R/OL](April 1, 2015)[March 26, 2016].

http://www.aliresearch.com/blog/article/detail/id/20347.html.

Those industrial parks spread over 29 provinces, autonomous regions, municipalities directly under the Central Government and over 110 cities. Most of them were located in Zhejiang, Guangdong, Jiangsu, Fujian and Shandong with the number of e-commerce industrial parks accounting for 70% of the total amount of industrial parks. The top five cities in terms of the number of e-commerce industrial parks were Hangzhou, Jinhua, Guangzhou, Wenzhou and Taizhou. More and more e-commerce derived service industries gathered and developed in the e-commerce parks, and ranged from photography, training, consulting, industrial and commercial affairs and other basic service industries to financial services, talent services, data services, supply chain services and other new service industries. Meanwhile, a large number of traditional wholesale markets and industrial parks were transformed into e-commerce parks, showing a new trend of diversified development.

3.1.3The service system was improved increasingly

After years of development, China's e-commerce service industry has formed a service system featured with a wide varieties of industries, effective coordination and sustained evolution, and highlighted its important economic and social value on multiple levels such as reducing e-commerce transaction costs, promoting the development and transformation of enterprises, boosting the development of related industries and creating employment opportunities.

As China has become the world's largest e-commerce market, the e-commerce service industry was faced with new demands and challenges in the category, scale, level and efficiency of services. In 2015, the e-commerce service achieved more than simple scale growth and low-level competition to enter a new development phase by service innovation and coordination.

At present, China's e-commerce service industry has formed six main varieties of services: platform services, IT technical services, marketing services, logistics services, financial services and derivative services. According to the statistics on the e-commerce service enterprises of Zhejiang Province, among those services, the number of the marketing service enterprises was the biggest, accounting for about 40%; followed by IT services enterprises, accounting for about 21%; and platform service enterprises, logistics service enterprises, logistics service enterprises accounting for 20%, 9% and 9% respectively $^{\circ}$.

In 2015, in the selecting activity of Taobao's quality e-commerce service providers (Taopaidang), the service providers dominated by sellers on the third party e-commerce platform were divided into three categories and 27 types, fully reflecting different types of the e-commerce transaction services in China (see Table 3.1).

IT software tools	Non-IT value-added services	Innovation service industry
Industry/shop analysis	Quality inspection and control	Network-wide marketing services
Direct train optimization	Photography services	Shopkeeper consulting
Traffic promotion	Customized service	Training/recruitment
Promotion management	Direct train custody	Industrial park lease
Store management (commodities management and order processing)	Diamond exhibition custody	Finance
E-commerce background system (ERP or purchase,	Decoration market (shop	Babysbreath plan 3

		0
Table 3.1	Evaluation and Classification of Taobao's Quali	ty E-commerce Service Providers in 2015

^o Department of Commerce of Zhejiang Province. Special Report on the Development of the Ecommerce Service Industry in Zhejiang Province [EB/OL](June 17, 2015) [March 26, 2016]. http://www.zcom.gov.cn/art/2015/6/17/art_1127_176187.html.

[©] Taobao ."Taopaidang" selection activity for the first half year of 2015 was launched [EB/OL](June 12, 2015) [March 26, 2016].

http://fuwu.bbs.taobao.com/detail.html? spm=a210m.7789807.0.0.paKSCq&postId=1753414.

[®] It is a service solution based on QR code technology launched by Alibaba, and can achieve the production data management, product traceability, anti-counterfeit authentication, product descriptions, user interaction and other functions.

sales and inventory)	template)	
Customer relationship management	Wireless Interaction (wireless shop template)	
Customer service	Magic Pen template	
Qianniu plug-in	Operation service	

^o Market for product details page provided by Taobao

		Continued
IT software tools	Non-IT value-added services	Innovation service industry
Wireless interaction (wireless shopping guide tool, wireless membership management, wireless member games, wireless marketing tool and Xiaopu)		
Warehouse Management System		
Yushanfang ^①		
Babysbreath plan		

3.2 Development of the e-commerce transaction service industry

3.2.1 Overview

Among the e-commerce transaction services in China in 2015, B2B transaction was a big part of the market as its size accounted for about 77.1%. By 2015, since Tmall, JD.com, vip.com and other quality B2C platforms constantly expanded their business scope, the domestic B2C market has been greatly developed. The proportion of the B2C transaction scale in the total transaction scale was further improved to 12.1%, and C2C about 10.8% (refer to Chart 3-5).



Chart 3-5 Segmentation of the Scale of the E-commerce Businesses in China in 2015

Source: CCID Consulting

3.2.2Trading services between enterprises

1. Market size

In 2015, the operating revenues from the SMEs platforms continued a steady growth. As at the end of 2015, the operating revenues from the SMEs platforms in China increased by 14.7% YoY to RMB 21.6 billion (refer to Figure 3-6) ^{(\circ)}.

^o Yushanfang is a platform offering cloud data services provided by Taobao, and can provide a wealth of Taobao data for users, have strong and stable cloud computing capabilities, and guarantee the safety of Taobao's data through the specific container mode.

[®] IResearch. 1. From 2015Q1, iResearch only calculated the operating revenues from the SMEs B2B e-commerce market platforms in China, covering membership fees, trading commissions, advertising fees and other revenues of the platforms, and excluding proprietary trading revenues of operators. 2. from 2015Q1, iResearch started to include the JQW.com in the calculation scope of the operating revenues from B2B operators' platforms.


Figure 3.6 Operating Revenues of the SMEs B2B Operators' Platforms in China from 2011 to 2015

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews.

The growth in the operating revenues from the enterprise platforms' services was mainly influenced by three factors: First, the influence from the industry: In the third quarter, the great downward pressure on China's economy brought a certain degree of impact on the industrial development; second, the influence from the import and export market: China's import and export fell 9.9% YoY in the third quarter, reflecting the trend of the import and export transaction of SMEs from the transaction view, and having a certain degree of impact on the online transaction of SMEs; third, the advertising services, information services, transaction services and other financial services and other value-added services of the SMEs' B2B platforms in China developed steadily, and some operators enhanced the service abilities such as payment and settlement, warehouse logistics and data services, thus promoting the development of online transactions and value-added services to advance the steady year-on-year growth of the B2B online transaction scale and the operating revenues as a whole.

As a representative of the SMEs' e-commerce platforms, by the end of 2015, Alibaba has had more than one million domestic suppliers, 10 million domestic purchasers and 100 million overseas purchasers across five continents, showing the great potential of the B2B market development (refer to Figure 3-7) $^{\circ}$.



Figure 3-7 Geographic Distribution of Overseas Purchasers on Alibaba.com

Source: Alibaba

^a Ali Research Institute. White Paper on Alibaba's Business Services Zoology (2016)[R/OL](March 4, 2016)[March 26, 2016]. http://m.taohua.com/markets/fuwu/report.

2. Highlights in 2015

In 2015, in-depth adjustments were made on China's economy and traditional industries, which transformed from the seller's market to the buyer's market, and brought new opportunities to B2B services. In the field of shipping forwarder, the monopoly control ability of the shipping companies in the upstream of the industry fell, and the traditional shipping forwarder enterprises made losses, while "Yunquna.com" "Shipping City.com", "2cargo.com" and other enterprises representing the B2B e-commerce enterprises for shipping forwarder assisted foreign trade enterprises quickly find the cheapest shipping space, provide better international logistics services, and gather a large number of downstream foreign trade enterprises to obtain rapid development. The chemical engineering, coal and other B2B vertical e-commerce industries also presented such a feature, and faced the same development opportunities.

In recent years, the capital flooded into the enterprise B2B platforms and produced a demonstration effect for the enterprises' B2B transaction services in China. A new round of financing completed by "zhaogang.com" and other B2B matchmaking trading e-commerce enterprises drove the transformation of a batch of enterprises in the chemical engineering, coal, shipping, cloth, agriculture and other fields into new type of e-commerce enterprises. With the support of the capital, B2B e-commerce transaction platforms took root in all segments like a hundred flowers in bloom.

3.2.3E-retailing transaction services

1. Market size

According to the data on the e-retailing size of the National Bureau of Statistics, in 2015, the GMV of the e-retailing in China reached RMB 3.8773 trillion with a year-on-year growth of 33.3%. Among them, the e-retailing sales of physical commodities were RMB 3.2424 trillion, up 31.6% and accounting for 10.8% of total retail sales of consumer goods; the e-retailing sales of non-physical commodities were RMB 634.9 billion with an year-on-year growth of 42.4%[®]. Figure 3-8 reflected the GMV of the e-retailing and the proportion of the total retail sales of consumer goods in China in recent years.



Figure 3-8 GMV of the E-retailing and the Proportion of Total Retail Sales of Consumers Goods in China in Recent Years

Source: National Bureau of Statistics

2. Highlights in 2015

(1) The retail sale of the mobile shopping grew rapidly. In 2015, more and more online consumers shopped on mobile devices,

^o National Bureau of Statistics. China's Economy Realized a Moderate but Stable and Sound Growth in 2015 [EB/OL](January 19, 2016) [January 27, 2016].

http://www.stats.gov.cn/tjsj/zxfb/201601/t20160119_1306083.html.



, and became the main engine for the rapid development of the mobile shopping (refer to Figure 3-9).

Figure 3-9 The increase in the number of online shoppers using mobile devices was three times as many as the increase in the number of online shoppers

(2) The e-retailing sales of non-physical commodities was growing at a faster pace. In 2015, the growth of the e-retailing sales of non-physical commodities reached 42.4%, higher than 11% of the growth of the e-retailing sales of physical commodities (refer to Figure 3-10).



Figure 3.10 Growth in the E-retailing Sales of Physical Commodities and Non-physical Commodities in 2015

(3) The financial service on the network consumption became a hot issue. In 2015, the e-retailing service providers competed for trying out the financial services on network consumption. "Tmall Treasure" and "Purchase by Installment" of Tmall, "JD Baitiao" launched by JD.com, and "Ant Check Later" launched by Ali Loan and Taobao and Tmall have been well developed.

(4) E-retailers vigorously developed cross-border e-commerce businesses. In 2015, cross-border ecommerce businesses became the development focus of e-retailers. Specifically, Tmall realized "Global Purchase" and "Global Sale" on Double Eleven festival day: there have been nearly 5,000 domestic vendors participating in "Double Eleven" with 50 million discounted commodities. The cross-border ecommerce businesses attracted 64 countries and regions to take part in it, mainly Russia, Spain, United Kingdom, France and Israel, leading to the growth of the total transaction value. Meanwhile, more than 5,000 overseas famous brands from 25 countries and regions such as the United States, Europe, Japan and Korea took the lead, baby and mother care products, beauty products, food, fresh products, apparel and other imported products were covered, and department stores, supermarkets, FMCG platforms, duty-free shops and other retailing formats presented to ensure that domestic consumers are given the best experience in buying imported commodities. In addition, on the eve of "Double Eleven", hundreds of top retailers from Europe and America and Alibaba Group entered into an exclusive strategic partnership to settle down in Tmall on a large scale, and participate in this global "Double Eleven" festival day.

3.3 Development of the e-commerce service industry

3.3.1 Electronic payment services industry

1. Market size

In 2015, in the third-party Internet payment transaction size market, Alipay still took the leading position in the e-commerce payment market, accounting for a market share of 57.3%. According to the monitoring data of WeChat and QQ, as at November 2015, there have been over 200 million WeChat users binding their banks cards to their WeChat accounts. With the rapid development of WeChat, TenPay ranked as the second with the market share rising to 15.7%, followed by China UnionPay, 99Bill, UMPAY, 172.com and other enterprises carrying out mobile payment earlier (refer to Figure 3-11).



Figure 3.11Competitive Landscape of E-commerce Payment Systems in China in 2015

Source: CCID Consulting

In 2015, China maintained a rapid growth in the e-commerce payment businesses, and had a significant increase in the telephone payment and mobile payment businesses. In the third quarter, the national banking institutions handled 27,138 million electronic payment businesses involving an amount of RMB 553.07 trillion. Among them, there were 8,212 million online payment businesses totaling RMB 432.81 trillion, an increase of 15.95% and 18.39% YoY respectively; 78 million telephone payment businesses totaling RMB 4.76 trillion, an increase of 136.44% and 203.18% YoY respectively; and 4,542 million mobile payment businesses totaling RMB 18.17 trillion, an increase of 253.69% and 194.86% YoY respectively. Non-bank payment institutions handled 21,308 million network payment businesses totaling RMB12.8 trillion, an increase of 122.72% and 102.21% YoY respectively [®]. As at March 2015, the Central Bank issued a total of 270 third-party payment licenses [®].

http://www.pbc.gov.cn/zhifujiesuansi/128525/128545/128643/2981803/index.html.

⁽⁰⁾ People's Bank of China. Overall Conditions for the Operation of the Payment Systems in the Third Quarter of 2015 [EB/OL](November 25, 2015)[January 17, 2016].

[®] Kuaiji.com. List of Third Party Payment Licenses in 2015 (Full Version) (August 3, 2015) [January 27, 2016]. http://www.kuaiji.com/news/2831329.

2. Highlights in 2015

(1) The mobile payment led to the emerging scenarios and maintained a high growth. The mobile payment has the features of portability, convenience, simplicity and efficiency, and resulted in the emerging of the application scenarios such as local life, to purchase of goods and taxi payments. With the upgrading and application of LBS and other technologies, the formation of the Internet of Things will bring more new trading scenarios. In 2015, the popularity of mobile APP market and various applications brought the prosperity of the mobile internet, and more and more entities, individuals and devices were connected together. The business models based on the mobile Internet, NFC, HCE, Token, biometrics and other types of technologies were innovated, the application scenarios were enriched constantly, and the integrated development of online and offline businesses accelerated.

(2) Payment data businesses. The expansion of the credit value-added services based on the transaction data will become the working direction of the payment institutions. Such payment has dual attributes of finance and data. After years of accumulation, the third-party payment institutions had a large number of data sources. The analysis results after the handling of these data had a high application value, and can provide precision marketing, customer management, credit rating and other value-added services.

(3) Social complexity of electronic payment. The integration of electronic payment and social network became one of the highlights of 2015. For example, In the Spring Festival of 2015, the "red envelope" function of WeChat and Alipay wallet went viral in a short time.

3.3.2E-commerce logistics service industry

1. Market size

In 2015, Chinese express delivery enterprises accumulatively delivered 20.67 billion pieces with a yearon-year growth of 48%; the accumulative business income was RMB 276.96 billion with a year-on-year growth of 35.4%. Among it, the accumulative business income from delivery in the same city was RMB 40.08 billion with a year-on-year growth of 50.7%; that across different cities RMB 151.29 billion with a year-on-year growth of 33.8%; and that from international services and that from the delivery in Hong Kong, Macau and Taiwan RMB 36.96 billion with a year-on-year growth of 17% (refer to Figure 3-12). $^{\circ}$



Figure 3-12 Operation of Express Businesses in 2015

Source: State Post Bureau

⁽⁰⁾ State Post Bureau The State Post Bureau published the operation of the postal industry in 2014 [EB/OL](2015 08 03) [2016 01 27].

http://www.gov.cn/xinwen/2015-01/15/content_2804590.htm.

Accordingly, the number of express packages in several cities was significantly increased to a record high. Among them, there were five cities with more than 1 billion pieces of express packages in 2015, an increase of two over 2014; Guangzhou ranked the first with about 1.95 billion pieces of express packages; and 35 cities had no less than 100 million pieces and no more than 1 billion pieces.

Judging from the city rankings, Guangzhou, Shanghai and Beijing ranked the top three. Shenzhen, Hangzhou, Jinhua, Dongguan, Suzhou, Nanjing and Chengdu ranked the 4th to the 10th (refer to Table 3-2).

Ranking	City	Express business volume (0,000)	Ranking	City	Express business volume (0,000)
1	Guangzhou	195207.7	6	Jinhua	97095.0
2	Shanghai	170778.0	7	Dongguan	75121.9
3	Beijing	141447.3	8	Suzhou	56383.0
4	Shenzhen	140134.9	9	Nanjing	50251.9
5	Hangzhou	125707.3	10	Chengdu	38179.7

 Table 3-2
 Top Ten Cities in terms of the Number of Express Packages in 2015

Source: State Post Bureau, January 2016

Compared with 2014, the number of express packages of Shenzhen and Hangzhou has exceeded one billion, and joined the first echelon of the express scale; Jinhua had nearly 1 billion pieces of packages; Zhejiang, Guangdong and Shanghai were one of the few provinces and cities with a significantly greater number of express delivery than the number of receipts. Guangzhou was still the one contributing most to the growth in the number of the national express packages, but Shanghai was the city with the highest express revenues of RMB 45.5 billion. Moreover, during "Double Eleven" period, Zhejiang became the province with the biggest number of delivery on November 11, 2015, exceeding Guangdong for the first time.

From the view of the e-commerce logistics competition pattern in 2015, the third party logistics represented by SF Express and YTO Express, ZTO Express, BEST Express, YUNDA and STO. Express was the mainstream logistics model of the current mobile e-commerce, accounting for a share of 64.1%, which was also related to that the pattern of the current mobile e-commerce application market application market giving priority to the platform e-commerce enterprises. The share of the self-built logistics centers was 18.4%; followed by the logistics supply chain service providers for internal business processes, the logistics alliance enterprises, the logistics integration application enterprises with 10.3%, 2.4% and 2.7% respectively (refer to Figure 3-13).



Figure 3-13 Competitive Landscape of E-commerce Logistics Systems in China in 2015

Source: CCID Consulting

2. Highlights in 2015

(1) The daily handling capacity for express services hit a new record again. In 2015, driven by the "Double Eleven" online shopping carnival, the whole express industry had a maximum daily handling capacity of 467 million pieces of packages. This marked that the daily handling capacity for express services was pushed to a higher level.

(2) The express industry entered a new normal. The growth rate of the total express businesses volume has transited from a phase of explosive growth to a phase of stable growth. From 2010, the national express business volume was growing rapidly at a rate of more than 55% every year, even exceeding 60% in 2013. However, in 2015, the year-on-year growth of the express business volume fell below 50%, in consistent with the development trend of the new normal of the macroeconomics. The express industry, as a component of the new economic momentum, still had a relatively promising future for the development situation.

(3) The express businesses in the Middle China had a very sharp increase. The growth rate of the logistics in the eastern e-commerce developed regions began to slow down, as the year-on-year growth rate of the express business volume of Guangdong, Fujian, Shanghai and other developed regions and cities dropped below 50%. Among them, Fujian and Shanghai have fallen below 40%; Beijing's express logistics scale decreased to 27%; except Xinjiang, Tibet and other remote provinces, the east of Hu Line (or Heihe-Tengchong Line: China Population density contrast line) was higher than Shanxi, which was because of Beijing's e-commerce development scale. The integration of the Beijing, Tianjin, and Hebei regions, delegation of Beijing's logistics functions and other national strategic guidelines also had certain effects on it. In addition, the growth rate of the express logistics businesses in the eastern slowed down, but still maintained at a high speed because of the large base figure. The e-commerce and express logistics businesses in the Middle China picked up rapidly: In 2015, the growth rate of the express businesses volume of Hebei, Henan and Anhui exceeded 60%. Specifically, Henan and Anhui provinces even exceeded 70%, which may be attributed to the e-commerce development policies, the industrial base and the population flow-back in the Middle China; Hubei, Hunan and other central provinces had a steady and moderate growth.

(4) The e-commerce logistics businesses formats showed a diversified development trend. For the ecommerce logistics businesses, 2015 was a banner year. This year, the rapid development of the socialized warehouse, cross-border e-commerce and Rural Taobao made the business types more diversified. As more and more core nodes of Chinasmart Logistic Network of CAINIAO were completed and put into operation, the market share of "Cash on Delivery") increased rapidly. In 2015, during the "Double Eleven" period, the Ewinshine, Shubang and other landmark enterprises in the "Cash on Delivery" have taken shape, and the application of domestic postal packages was increasingly common. In 2015, major export target countries of the platform e-commerce enterprises were the countries along "One Belt One Road", most of them were the developed countries in Europe. The cross-border logistics has become an important part of the "One Belt and One Road" initiative. With the commencement of the new version of the Agreement on International Railroad through Transport of Goods and other pioneering international agreements, more and more cross-border e-commerce packages will pass by the new Silk Road and be delivered to consumers in the Western Asian and Europe.

3.3.3E-commerce accreditation services

1. Market size

As at December 31, 2015, China had 320,001,012 effective electronic accreditation certificates in total, including 31,251,291 authority certificates, 285,853,165 personal certificates and 2,896,556 device certificates ⁽¹⁾. There were 38 licensing units for use of the codes in electronic accreditation services approved by the Office of Security Commercial Code Administration ⁽²⁾.

In order to promote the healthy development of e-commerce, for inadequate supervision and constraint mechanisms, ambiguous code of conduct, information asymmetry and other problems encountered during the e-commerce transaction process, the Certification and Accreditation Administration of the People's Republic of China established a national e-commerce accreditation system, developed a series of standard rules such as "GECP", applied the internationally accepted third-party accreditation

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http://www.miit.gov.cn/n1146312/n1146904/n1648374/c4620972/content.html.
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⁽⁰⁾ Ministry of Industry and Information Technology. Development of the Electronic Accreditation Service Industry in December 2015 [EB/OL](August 3, 2015) [January 27, 2016].

http://www.miit.gov.cn/n1146312/n1146904/n1648374/c4620972/content.html.

⁽²⁾ Office of Security Commercial Code Administration. Directory of the Licensing Units for Use of the Codes in Electronic Accreditation Services [EB/OL](January 25, 2016) [March 27, 2016].

method to monitor and evaluate the online providers, platform providers and other business entities of the e-commerce so as to form a traceable and sustainable improvement mechanism, under which, the evaluation can be given to the whole e-commerce process from the quality of goods, , sales and after-sales service to information security.

The introduction of the e-commerce accreditation system was conducive to further regulating the ecommerce service behavior, guiding the e-commerce enterprises to improve the internal management system, strengthening the control over the quality of goods and services, and enhancing the overall quality and credit level of the e-commerce in China. The international mutual recognition mechanism was adopted to help China's e-commerce enterprises "go out", and promote the cross-border ecommerce development. At the same time, the e-commerce accreditation system built by China made innovation and breakthrough in the accreditation model under "Internet Plus", beneficial to China in gaining the right to speak for technical rules.

In order to promote the implementation of the e-commerce accreditation, six domestic well-known accreditation institutions under the leadership of the Information Center of the Certification and Accreditation Administration jointly initiated the establishment of the "China E-business Certification Alliance", and took the lead to conduct the e-commerce accreditation against the B2C commodity transaction types. In November 2015, The first batch of e-commerce accreditation certificates in China was issued, and Panasonic, Robam and other enterprises have become the first batch of enterprises obtaining the B2C e-commerce transaction services accreditation certificates [®].

With a view to promoting the construction of the social credit system in Shanghai, Shanghai Electronic Certificate Authority Center Co., Ltd. did a research and development on the electronic credit identification system, build a credit identification ecosystem for the overall lifecycle management of the credit information such as credit issuance, credit acquisition, credit display and credit use to realize the online application, issuance, display and verification of the electronic credit labels. The company also developed the electronic contract platform "Letussign.com", which was launched in December 2015. This platform used the identity authentication, digital certificates, electronic signatures, data encryption, trusted time stamp, electronic seal, digital watermark, two-dimensional bar code and other innovative technologies to provide a complete set of solutions for the negotiation, consultation, signature, notarization, payment and credit of the Internet-based electronic contracts.

In December 2015, at the Second World Internet Conference, the electronic contract services platform "Yunsign" launched a Wechat electronic signing room, released a new application for real-name authentication using mobile phones to scan Identity Cards, and displayed to use mobile phones to "Face Signing". Yunsign also signed a strategic cooperation agreement with the administration center of the national traffic and transportation logistics public information platform, which the Ministry of Transport belongs to, in Hangzhou to jointly develop, experiment and promote the standardized electronic documents in the logistics industry, and advance the logistics informatisation process.

2. Highlights in 2015

(1) More efforts were taken to expand new applications and new fields constantly. With the acceleration of the informatisation process, the advantages of the electronic authentication technologies in addressing the needs of the trust on the internet have been recognized by more and more industries, and included in the overall information security plans of the industries gradually to become an important guarantee for supporting the business innovation. This trend led to the application of the electronic authentication businesses in such fields as the medical informatisation, Internet lottery, electronic invoicing, online security and online insurance. For example, in the health care field, the construction of the hospital information system based on electronic medical records and the regional health care platforms were started with the implementation of China's new medical reform program. The Ministry of Health has issued a series of plans and policy documents regarding the promotion of electronic authentication services and the application of medical records, which will promote the electronic authentication market in the health care field to enter the rapid growth phase.

(2) "Integrated" electronic authentication solutions became a trend. As the information security risks were increasingly complicated, and the safety problems such as identity fraud, unauthorized access and acts of repudiation were increasingly serious, for safeguarding the implementation of online businesses in an orderly and healthy manner, it was necessary to meet the customer safety demands such as identity authentication, authorization management and liability identification. Therefore, single

^o First Batch of E-commerce Accreditation Certificates in China Issued in November 2015 [EB/OL](December 17, 2015) [April 10, 2016].

http://www.miit.gov.cn/n1146312/n1146904/n1648374/c4620972/content.html.

product or service cannot meet the comprehensive security needs of users. Only when the comprehensive utilization of services and a variety of products formed an "integrated" solution, can the internet trust needs of customers can be met. The "integrated" electronic authentication solution has become the development trend of the industry. The enterprises equipped with the "integrated" electronic authentication solution will have stronger competitive advantages.

(3) Electronic signature market has become a new growth point of the industry. The promotion of the informatisation to the in-depth application advanced the growth of the demand for reliable data messages in various businesses. For e-government affairs, online banks and other applications, there was a very urgent need to establish an effective responsibility identification mechanism in cyberspace to enhance the confidence of users in participating in network services and transactions. In recent years, the electronic signature businesses have entered a stage of rapid development. The electronic signature tools were developed from a single intelligent password key to multiple encryption methods applied to various patterns such as iPad, QR code of sub-machine, graphics recognition and fingerprints, the business models were developed from sale of single products to multiple cloud service models such as SaaS and PaaS, the application scenarios were increasingly enriched, and more and more innovative businesses in all the fields constantly emerged. All of these promoted the rapid development of the electronic signature market.

3.3.4Development of the service derived from e-commerce industry

With the increase in the demand for e-commerce transactions, payment and logistics services, in 2015, the e-commerce derived "service-type applications" continued to maintain a rapid growth. According to Alibaba's data, at present, there have been tens of thousands of service providers to provide e-commerce derived services for Taobao and Tmall sellers with annual GMV totaling billions of yuan. Those service providers provided hundreds of thousands of relevant services and tools such as shop decoration, photography, traffic promotion, commodities management, orders management, internal businesses management, quality inspection and control, customer service outsourcing, consulting services and personnel recruitment and training. The e-commerce derived services have become a new growth point for e-commerce size. Figure 3.-4 shows the growth rate of the transaction scale of Alibaba business services ecosystem (broad) ⁽ⁱ⁾.





Source: Alibaba

1. E-commerce operation service industry

In 2015, the e-commerce operation services presented the following characteristics:

(1) The demand for cross-border e-commerce operation services was greatly increased. In order to meet the rising consumption taste and capacity of Chinese consumers, the cross-border businesses flourished, and a large number of overseas merchants entered the Chinese market, bringing new opportunities and challenges to the e-commerce operation service providers. In 2015, Tmall operation service platform cultivated and provided 112 service providers with overseas brands service capacity across 13 main industries and provided services for 275 international shops. When the cross-border e-commerce was growing vigorously, the cross-border e-commerce operation services became a new growth point. Specifically, shop decoration, photography, search marketing and information translation were hotly requested. The provision of one-stop integrated services became the main method. In 2016, the platform plans to continue to nurture and provide more service providers equipped with cross-border service capacity to boost the development of the cross-border businesses.

⁽¹⁾ Ali Research Institute. White Paper on Alibaba's Business Services Zoology (2016)[R/OL](2016 03 04)[2016 03 26]. http://m.taohua.com/markets/fuwu/report.

Rapid growth of mobile operation service. The explosive growth of mobile internet brings the rapid growth of mobile operation service. Compared with PC, the "multi-platform development" feature of mobile end operation service is more obvious. It is common for enterprises to simultaneously carry out marketing, sales, after-sales service and others via Mobile Taobao, Mobile Tmall, WeChat, Weibo and other platforms. According to the data from Qianniu, biggest mobile end business operation platform of Alibaba, there were more than 6 million monthly users of Qianniu mobile end by the middle of 2015, after an explosive growth in active users of Qianniu mobile platform for mobile office work since the end of 2013. So far, most of the core functions necessary for stores, such as setting up a store, release of goods, transaction, data, through train and loans, have been mobilized.

Available online and offline channels. A number of brands have used the operation through all the channels to gradually realize the integration of online and offline channels through the optimization of benefit distribution mechanism. These brands not only make the online and offline systems available to realize the sharing of inventories for online and offline sales of the same goods, but also try various operation methods, such as shortest delivery for the online ordering, pick-up of goods from the store by the buyer, delivery of goods from the warehouse after the ordering by code scanning at the store (or delivery of goods from any store elsewhere). Alibaba offer a set of interfaces called "Qimen" for businesses to satisfy their demand for delivery of goods in the online and offline sales. On the shopping day on November 11, 2015, Cainiao Website realized the contact with the distribution company through Qimen interface, to solve the distribution time problem in connection with the delivery by stores and enable consumers to experience a better-than-expected delivery.

2. E-commerce information technology services

In 2015, the e-commerce information technology services had the following characteristics:

Collaborative innovation based on cloud computing. More and more service providers share data based on cloud computing to conduct a variety of collaborative innovations. In the past, because the data is not shared by service providers, it is difficult to carry out collaborative innovation. With the further improvement of technology, the safety and reliability of public cloud service are further recognized by enterprises; and its unique features such as flexible configuration, low cost, no need for lump-sum large investment would attract more small and medium-sized enterprises to adopt the public cloud service, which will increase its permeability. Aliyun, for example, provides complete public cloud services, storage service and security service.

Primary shape of e-commerce innovation ecology system. In 2015, the establishment, distribution, operation and management of mobile e-commerce service application are linked up for formation of a relatively complete service system. By July 2015, Aliyun has had more than 50 Aliyun solutions developed by partners on the basis of infrastructure provided by Aliyun, involving 50 applications such as e-commerce, manufacturing, finance, government affairs, medical treatment, video, games and multimedia, and covering internet of things, O2O, P2P and other innovative application directions. As estimated by analysis institutions, those partners applying Aliyun computing has higher gross profit (1.5 times), repurchase rate (1.6 times) and proportion of new customers (1.3 times).

3. E-commerce marketing services

In 2015, e-commerce marketing services registered the following characteristics:

(1) The application of big data helped improve the precision of marketing via e-commerce platforms. Data sharing has been achieved through data exchange between different internet platforms including portals, BBS and forums, Weibo and Wechat accounts, video websites and e-commerce websites. As a result, marketers have gained a deeper understanding of the preferences and online behaviors of the same consumer. On this basis, inter-platform precision marketing has been realized and brought different experience to consumers.

In 2015, Alibaba Group launched a new product -- Juxingtai, a big-data-driven platform for customer operation - to enhance business operations on the basis of comprehensive customer data. By relying on a mode of platform integrating online sales, online marketing and big data management, emar.com.cn has provided big data services for large B2C e-commerce operators, online brands and e-commerce companies engaged in internet finance, online games and other sectors.

(2) Programmatic marketing saw rapid growth. Based on data driver and real-time bidding, programmatic marketing supports real-time determination of advertising recipients, time, means, etc., so as to improve the precision of advertising and returns on marketing. In 2015, programmatic marketing entered the phase of rapid growth, fundamentally changing the traditional model of extensive advertising. JD.com's platform, Jingzhuntong (JZT), has thoroughly upgraded marketing modes in an integrated manner, making marketing easier. Yushanfang.com has developed, through in-depth custom data processing, the labels on places of origin and fat content for the business of milk import, providing Mengniu with professional support services in respect of product data series. 360 Big Data platform "Shangyi" and 360 marketing platform "Dianjing" complement and support each other, and perfectly combine the big data and the user life cycle, building a complete chain of advertising and marketing from advertising show to purchase of products.

4. E-commerce data analysis services

E-commerce data analysis services are in the process of rapid development, with diverse service contents and forms. The Shanghai Business School specially set up the field of e-commerce data analysis under the major of e-commerce, and classified internet data analysis into five categories:

(1) Online shop analysis, mainly covering the analysis of flows, transactions, products and other data about online shops, to support online shop operation, and this is one of the most widely used services;

(2) Customer analysis, mainly covering the analysis of scale, composition, distribution, access or purchase behavior, etc. of consumers or purchasers of online shops, to support customer development, customer retention, customer care and other related work;

(3) Business analysis, mainly covering the analysis of data on e-commerce operators in procurement, marketing, warehousing, after-sale services, human resources and other aspects, to support optimization of management and business of enterprises;

(4) Financial analysis, mainly covering the analysis of enterprise financial data, to support the operations and financial work of enterprises; and

(5) Market analysis, mainly covering the analysis of status, trends, competition, etc. regarding the relevant industries, to support enterprises to make decisions.

In 2015, e-commerce data analysis services registered the following characteristics:

(1) Diversified services met different needs. For the common needs, data analysis service providers satisfied the needs micro and small e-commerce operators by using software; while for individual needs, data analysis service providers catered to medium and large e-commerce operators by providing customized software or solutions or other means.

(2) Data analysis services became mobile. With the rapid expansion of mobile workbenches for ecommerce operators (such as Qianniu), data service providers could provide mobile data analysis services by means of plug-in, app, etc.

(3) Data analysis was integrated with many other services. As data is widely used in all aspects of ecommerce, data analysis has been integrated with IT systems, operations outsourcing, staff training, customer care and other e-commerce derivative services, adding new content to those services and reflecting the diversified scenarios of data services.

5. E-Commerce parks

The e-commerce parks have become increasingly mature, evolving from the original simple clusters in extensive development to diversified, integrated and supply-chain growth. The service recipients have also been expanded to cover, in addition to e-commerce operators and derivative service suppliers, B2B enterprises, cloud computing service providers, startups, and even e-commerce manufacturing entities.

With the diversification of e-commerce parks and service industry, the services provided in the parks have changed in the following ways:

(1) 1.0 infrastructure and supporting service system: Including the main property services, supporting living services and intelligent park service, etc., focusing on the hardware and basic services.

(2) 2.0 growth booster service system: helping the growth of e-commerce, giving strong support to public entrepreneurship and innovation, and playing better the functions as e-commerce incubator. It includes financial services, equipment leasing, warehouse receipts pledge, labor supply, soft operating system, docking of transport capacity, financing guarantees, flexible solutions for small and medium businesses, etc.

(3) 3.0 supply chain value-added services: Reshaping the supply chain, introducing upstream and downstream enterprises engaged in e-commerce on the basis of industrial chain, creating a good industrial environment for enterprises, and providing data support, business networks and even brand endorsement.

In 2015, the development of e-commerce parks registered the following characteristics:

(1) Constantly expanding scale of e-commerce parks. As of March 2016, there were 1,145 ecommerce parks, up by about 125% year on year; and the building e-commerce parks was still in boom. In addition, a number of e-commerce operators have clustered in science parks, innovation parks and other types of industrial parks.

(2) Geographical concentration and individual small scale. Geographically, e-commerce parks were unevenly distributed in the country, mainly concentrating in Zhejiang, Guangdong, Jiangsu, Fujian and Shandong. The total number of e-commerce parks in the said five provinces accounted for more than 70%. It can be seen that the development of e-commerce parks are positively correlated with regional economy; in regions with developed economy and higher level of opening up, e-commerce parks develop more quickly ⁽¹⁾. In addition, most of the e-commerce parks were on small scale. According to the statistics, the majority of e-commerce parks in China cover an area of less than 50,000 square meters, and some parks even have a construction area of less than 5,000 square meters.

(3) Development from industrial bases to entrepreneurship incubators. Many e-commerce parks are no longer simply industrial bases for e-commerce operators; they have changed into innovation parks, becoming incubators under the Information Economy. Some e-commerce parks have paid more attention to their incubation functions, starting to build makerspaces.

(4) Supply chain-based development of the parks. As the system of e-commerce economy is becoming mature, a number of e-commerce parks have started to remodel their supply chains offline, changing from simple and basic supporting service system, to growth booster service system, gradually to supply chain value-added service system. They have developed from the 1.0 model featuring simple cluster of e-commerce operators and supportive or derivative services providers, to a supply chain system integrating logistics and express delivery, online retail, B2B, and e-commerce factories. Thus, the supply chain for the e-commerce ecology was optimized, vertically covering the upstream and downstream of the industrial chain and horizontally supportive and derivative services and other businesses, so as to achieve optimal combination of physical space for industrial cluster supported and driven by data application, and form a new supply chain system under the Information Economy.

Ecological cluster in the development of parks. Over the past two years, the development of ecommerce parks has shown large scale, and the state of ecological agglomeration featuring cluster of e-commerce operators and services as well as integration of innovation. Table 3-3 shows the differences in ecological agglomeration of e-commerce parks in different forms[®].

Form	Cluster of e-commerce operators	Cluster of services	Integration of innovation	
Settled-in enterprises	Mainly e-commerce operators	E-commerce operators, service providers, etc.	E-commerce operators, service providers, etc.	
Inter- enterprise relationship	Settled-in enterprises are relatively independent from each other, and the	Diverse relationships are established between settled-in enterprises, and the	Diverse relationships are established between settled-in enterprises; stronger relationships	

Table 3-3	Differences in ecological agglomeration of e-commerce parks in different forms
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 ^a Ali Research Institute. Report on the Development of E-Commerce Parks in China (2014-2015) [R / OL] (March 4, 2016) [March 26, 2016]. http: //i.aliresearch.com/img/20150401/20150401114309.pdf.
 ^a Ali Research Institute. Report on the Development of E-Commerce Parks in China (2014-2015) [R / OL] (March 4, 2016) [March 26, 2016]. http: //i.aliresearch.com/img/20150401/20150401114309.pdf.

· · · · ·	relationship between the park and the enterprises is weaker	between some enterprises; and the relationship between the park and the enterprises is stronger
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Continued

Form	Cluster of e-commerce operators	Cluster of services	Integration of innovation	
Supporting services	Living services mainly	living services and business services; some parks have introduced government services	Living services and business services; and the parks have innovated and integrated certain services (such as warehousing and IT)	
Focus	Attracting investment	Attracting investment and operation	Operation and service	
Profit model	Rental income and government subsidies	Rental income, value-added services, and government subsidies	Value-added services and rental income	

Source: Previous Statistical Reports on Internet Development in China

6. E-commerce service stations

E-commerce service stations provide comprehensive e-commerce services for consumers including receiving and delivery of parcels, self-service pick-up, shopping guide and purchase agency, and payments for living facilities. The service stations are usually set up close to residential areas, universities and colleges, office areas and other places with dense population. Some stations are under the charge of full-time employees designated by relevant companies, while some others are operated by part-time personnel. As the e-commerce economy is becoming mature, service station operators have been diversified, covering entities in addition to the original convenience stores and property management offices.

E-commerce service stations can be divided into two categories according to their geographical locations:

(1) System of urban service stations. In urban areas, a large number of service stations mainly engaged in logistics services have emerged, such as Cainiaoyizhan, Fengchao, Heike, and Cash-on-delivery outlets. They provide logistics services including collection and distribution of parcels as well as other ancillary services. The agent-collection services and automatic courier service boxes have, to some extent, solved issues like consumer's privacy and repeated delivery. A majority of cash-on-delivery outlets were transformed from conventional service outlets, such as newspaper delivery sites.

(2) System of rural service stations. Alibaba, JD.com and other platform enterprises have their channels further expanded into the rural areas, and set up county and village operating sites in rural areas. Village sites have the functions of agent-purchasing, shopping guide and guarantee; the site operators are mainly local residents in partnership. Some sites even have product display and other functions. County outlets have functions of management, training and logistics. Currently, most of the courier network can only reaches counties; the logistics between counties and villages is undertaken by regional logistics enterprises and local postal services. For logistics in rural areas, the model of T + 1 is adopted; that is, the goods are stored at the county service stations on the first day, and will be delivered to village sites by regional logistics enterprises on the second day.

3.4 Prospects of e-commerce services

3.4.1The ecosystem of online business services will become the core of the modern service industry

Based on the new information technologies, i.e., cloud computing, internet and smart terminals, a large number of new business service modes have emerged in e-commerce sector. Those new technologies and modes have significantly impacted the existing e-commerce in three aspects:

(1) the scope of services has changed from external market transactions to internal operations of enterprises, and integrated IT and operational services are provided to enterprises by offering online software and information system services, such as online ASP, CRM and financial management;

(2) The service links in trading services extend from pre-trading to in-trading and post-trading stages, and trading service platforms are providing online deal-making and closing services for certain types of enterprises, products and services selectively and with targets; and

(3) The ecological systems for e-commerce and e-commerce operators has improved, with third-party payment, modern logistics, and other supporting services developing more rapidly and further integrating with traditional industries, as well as the innovation in technologies and business modes sped up.

Along with the involvement of more and more services, enterprises and consumers, a commercial service ecosystem different from the previous ones will take shape in the e-commerce market, and this ecosystem will continue to attract more players and develop into the core of the modern service industry in future.

3.4.2A consensus will be reached that the platform model is the core of e-commerce services

In future, service modes of the service platforms will be innovated, with major breakthroughs achieved in the areas of services, scope of services and service functions. "Platforms" will play a "public service" role, becoming important commercial infrastructure in information society.

Based on the integration of a platform, more and more credit, authentication, payment and logistics services have been combined via online business service platforms, to further improve the service level of the entire e-commerce service sector.

Integrated service platforms and industrial service platforms will get rid of low-level competition, fully maintain and exert their respective advantages, and continue to cooperate with each other and even integrate with each other, to create the new service model of serving as each other's platform. "Instrumental platform" will be upgraded to "ecological platform".

3.4.3 Technological innovation will continue to drive rapid innovation in business services

Cloud computing, big data, internet of things, mobile internet, artificial intelligence, virtual reality and other technological innovations will provide new impetus and room for expansion in respect of innovation in e-commerce service mode and business model.

Cloud computing will provide business services with strong technical support to solve bottleneck problems in respect of computing capacity, storage space, and bandwidth resources. Business software and services will be widely deployed in the cloud computing platform in future.

Big data is not only able to facilitate marketing, but also to support routine operation, production and innovation of enterprises. At present, big data-related services have been extended to the retail, finance, education, medical care, sports, manufacturing, film and television, government and other industries and sectors.

The internet of things will help enhance the efficiency and intelligence level of information access, storage, processing and transmission in e-commerce activities, bringing in unprecedented changes to business in respect of information, payment, logistics and other areas.

Mobile internet facilitates the formation of a multi-dimensional commercial system consisting of TVs, PCs, PADs and sub-machine, and will penetrate into business, work, life, learning and other areas more quickly, becoming increasingly popular.

Artificial intelligence will re-organize the existing knowledge structure, enabling e-commerce service platforms to communicate with people basically. This will help enterprise better understand the behavioral characteristics of people involved in e-commerce and provide more intelligent services.

Virtual reality can human body simulation in respect of vision, hearing, touch, smell, taste and other perceptions, enabling consumers to have a more "immersive" experience. This will also lead to more innovations.

Chapter 4 Special Report on the Development of Industrial E-commerce

To accelerate the development of new economy, there should be emerging driving forces as well as reform and transformation of traditional impetus. Through the practical application of the most advanced information technology, e-commerce, which is representative of the new economy, has brought huge impacts on traditional industries and promoted the transformation and development thereof. This special report focuses on the manufacturing and the circulation industries to describe the penetration of e-commerce into traditional industries as well as the integration between e-commerce and traditional industries in China in 2015.

4.1 Overview

In 2015, faced with complex and volatile international environment and arduous tasks in stabilizing domestic development and reform, the industrial sector in China adhered to seeking progress while working to keep performance stable, went full length to deepen the reform and opening up, and focused on innovation and macro-control, to foster new innovation drivers. The industrial sector maintained stable operation under the new normal. In 2015, the industrial enterprises above designated size obtained RMB 110 trillion of income from primary business, up by 0.8% compared with that of the previous year, with a total profit of RMB 6.3554 trillion and profit from principal operating activities of RMB 5.86402 trillion ⁽¹⁾. In the same year, the National Bureau of Statistics surveyed the e-commerce business of 906,000 enterprises [©] using the platform for networked direct reporting by enterprises. The survey data showed that in 2014, large and medium industrial enterprises in China (manufacturing, mining, electric power, heat and gas supply industries) had achieve a GMV of RMB 3.512035 trillion, of which the procurement via e-commerce amounted to RMB 2.96992 trillion and the sales via ecommerce amounted to RMB 4.05415 trillion (including RMB 3.8375 trillion of B2B sales)⁽³⁾. In 2015, the GMV of large and medium industrial enterprises amounted to RMB 4.21444 trillion. Table 4-1 shows the survey data relevant to e-commerce of over 370,000 large and medium industrial enterprises in China in 2014 from the National Bureau of Statistics

Table 4-1	Survey of e-commerce procurement, sales	, GMV and proportions in industrial enterprises in 2014
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Industry	Number of enterprises	Number of enterprises with e- commerce	Proportion (%)	Annual GMV (RMB 100 million)	E- commerce sales (RMB 100 million)	B2B sales (RMB 100 million)	B2C sales (RMB 100 million)	E-commerce procurement (RMB 100 million)
Total	372241	30411	8.2	35120.35	40541.5	38375	1955.6	29699.2
Mining	15654	180	1.1	547.3	154.5	153.4	0.5	940.1
Manufacturing	347376	29938	8.6	32385	40314.4	38154.0	1950.8	24455.6

^a National Bureau of Statistics. Total profits of industrial enterprises above designated size in 2015 decreased by 2.3% over the previous year (January 27, 2016) [January 27, 2016].

http://www.stats.gov.cn/tjsj/zxfb/201601/t20160127_1310925.html.

Enterprises under the survey included: industrial enterprises with annual revenue of RMB 20 million and more than 300 employees, gualified construction companies, wholesalers with annual revenue of RMB 400 million and more than 200 employees, retailers with annual revenue of RMB 200 million and more than 300 employees, all legal entities engaged in real estate development and operation, and legal entities engaged in the service industry with annual revenue of RMB 10 million or more or 50 or more employees as at the end of each accounting period.

[®] According to the survey data on the information level of 854,000 large and medium industrial enterprises in China from the National Bureau of Statistics, the GMV of ecommerce of large and medium industrial enterprises in 2013 was amended.

								Continued
Industry	Number of enterprises	Number of enterprises with e- commerce	Proportion (%)	Annual GMV (RMB 100 million)	E- commerce sales (RMB 100 million)	B2B sales (RMB 100 million)	B2C sales (RMB 100 million)	E- commerce procurement (RMB 100 million)
Electricity, thermal power, gas and water production and supply	9211	293	3.2	2188.05	72.6	67.6	4.3	4303.5

Source: National Bureau of Statistics

In addition, under the guidance and leadership of governments at all levels, industrial enterprises have applied e-commerce to a larger and deeper extent, and drove the application of e-commerce by a number of small enterprises through the supply chain, upstream and downstream enterprises, technology dissemination and other channels, to gradually integrate and optimize the information flow, logistics and capital flow along the supply chain, develop an interactive and friendly e-commerce ecosystem for the industry, and promote coordinated development of the industry chain. Especially, with the constant expansion of business and gradual accumulation of experience in operation, a number of leading enterprises have gained rapid improvement in the integration of upstream and downstream information and the capacity of driving relevant enterprises through self-built e-commerce platforms, showing a trend of gradual transition to a third-party industrial platform, which has led to the coordinated development with more small and medium enterprises and imposed an increasingly important impact on the industries. According to the data from the survey on 52,432 industrial enterprises nationwide conducted by the China Service Platform for Integration of Informatization and Industrialization, as of December 2015, the rate of e-commerce penetration in China's industrial enterprises reached 49.55%; the enterprises with e-commerce sales accounted for 37.64%, with ecommerce procurement 36.83%; and those with both e-commerce purchase and sales accounted for 24.92%.

4.2 Current status of the development of industrial e-commerce

4.2.1E-commerce level of the consumer goods sector is relatively higher

The current development of China's industrial e-commerce is showing a significant difference among the industries. First, in terms of the rates of e-commerce procurement and sales penetration, industrial sectors with higher level of e-commerce application are mainly concentrated in consumer goods sectors and industrial equipment industries, such as culture and education, industrial art, sports and entertainment products manufacturing, tobacco industry, furniture manufacturing, food manufacturing, instrumentation manufacturing, automobiles, computers, communications and other electronic equipment manufacturing. E-commerce penetration rates in the said sectors were far ahead, significantly higher than the overall penetration rate of e-commerce in the industrial art, sports and entertainment products manufacturing and instrumentation manufacturing, penetration rates of e-commerce purchases and sales were higher than 50%. In the sector of industrial raw materials, such as petroleum processing, coking and nuclear fuel processing industries, and metal products manufacturing industries, the penetration rate of e-commerce purchase and sales were less than 50%, but higher than the overall penetration rate of sectors in China at present. Above all, e-commerce has more deeply integrated with the consumer goods sector of china.



Figure 4-1 Top 10 industrial sectors in terms of the penetration rate for e-commerce purchase

Data source: China Service Platform for Integration of Informatization and Industrialization





Data source: China Service Platform for Integration of Informatization and Industrialization

Second, in terms of online purchases and online sales, some consumer goods sectors and equipment industries with higher penetration rates of e-commerce purchases and sales still took the lead, such as tobacco products, furniture manufacturing, culture and education, industrial art, sports and entertainment products manufacturing, and automobile manufacturing (see Table 4-2). This further demonstrated the in-depth application of e-commerce in consumer goods sectors and equipment industries. On the other hand, in some raw materials industries, such as oil and natural gas exploitation industry, although the e-commerce penetration rates were lower than those of the consumer goods sectors and equipment industries, online purchases or sales accounted for a prominent part. Online purchase of oil and gas exploitation industry topped other industries, up to 95.82%, and the online sales reached 22.69%, ranking fifth among all the industries. This shows that B2B e-commerce remains prospective in the raw materials industry.

Table 4-2	Top 10 industrial	sectors in terms of	f online purchases	and online sales
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Ranking	Top 10 industries in terms purchases	of online	Top 10 industries in terms of online sales		
	Industry	Proportion (%)	Industry	Proportion (%)	
1	Oil and gas exploitation	95.82	Tobacco products	92.35	
2	Automobile	72.12	Furniture manufacturing	49.60	

Continued

Ranking	Top 10 industries in terms of purchases	of online	Top 10 industries in terms of online sales		
Ranking	Industry	Proportion (%)	Industry	Proportion (%)	
3	Furniture manufacturing	56.21	Ferrous metal mining and dressing	35.31	
4	Pharmaceutical manufacturing	55.91	Automobile	30.54	
5	Other mining	52.26	Oil and gas exploitation	22.69	
6	Liquor, soft drinks and refined tea manufacturing	45.06	Culture and education, industrial art, sports and entertainment products manufacturing	21.08	
7	Tobacco products	44.65	Other mining	16.82	
8	Power generation and supply	43.08	Printing and record media reproduction	15.07	
9	Chemical fiber manufacturing	30.61	Special equipment manufacturing	13.97	
10	Printing and record media reproduction	27.80	Metal products	13.07	
	Overall	20.76	Overall	1.32	

Data source: China Service Platform for Integration of Informatization and Industrialization

Differences in the development of e-commerce in varied industrial sectors are the result of many factors. First, the level of e-commerce in industrial sectors is affected by the market structure and enterprise scale. Then, the level of standardization of production and distribution on the market. Therefore, e-commerce in industrial sectors can be effectively boosted with unified product standards and clear production and distribution processes. Otherwise, the development will be restricted by non-unified product standards, non-standard processes, and difficulty in controlling the quality. Finally, the application level of e-commerce in industrial sectors is directly affected by the level of informatization of the relevant industries and the enterprises. As a result, e-commerce has shown imbalanced development in various industrial sectors.

4.2.2 Regions with developed economy show higher level of e-commerce development

Similar to the conditions described above, the development of industrial e-commerce registered significant gradient difference in various regions in China. Figures 4-3 and 4-4 and Table 4-3 show the penetration rates of e-commerce purchases and sales as well as proportions of online purchases and sales of industrial enterprises in provinces and municipalities. Currently, industrial e-commerce is concentrated in the eastern, northern and southern regions, with gradual rise in central, southwestern and northwestern regions.





Data source: China Service Platform for Integration of Informatization and Industrialization



Figure 4-4 Top 10 provinces and municipalities in terms of the penetration rate for industrial e-commerce sales

Data source: China Service Platform for Integration of Informatization and Industrialization

Ranking	Top 10 provinces and munic online purcha		Top 10 provinces and municipalities in terms of online sales		
	Province or municipality	Proportion (%)	Province or municipality	Proportion (%)	
1	Beijing	88.98	Beijing	76.21	
2	Shanghai	50.41	Fujian	27.02	
3	Liaoning	48.33	Shanghai	24.34	
4	Jiangsu	44.83	Hunan	11.85	
5	Anhui	42.62	Guangdong	7.47	
6	Jiangxi	30.35	Jiangsu	5.63	
7	Sichuan	22.60	Liaoning	4.85	
8	Henan	19.28	Anhui	3.92	
9	Shaanxi	18.97	Tianjin	3.58	
10	Hubei	16.81	Zhejiang	3.48	
	Overall	20.76	Overall	1.32	

Table 4-3 Top 10 provinces and municipalities in terms of online purchases and online sales

Data source: China Service Platform for Integration of Informatization and Industrialization

Specifically, in some big cities and eastern coastal provinces represented by Beijing, Shanghai, Fujian, Guangdong and Anhui, industrial e-commerce has been more popular and more widely used. On one hand, nearly all the penetration rates of e-commerce purchases and sales in those provinces and municipalities were higher than 40%, among which the rate in Fujian even reached 60%, showing the prosperity of industrial e-commerce in those regions. On the other hand, the proportions of online purchases and online sales in those provinces and municipalities were remarkable, among which the proportions of online purchases and sales in Beijing were up to 88.98% and 76.21% respectively, topping all the other provinces and municipalities.

In contrast, according to the data on those provinces in central and western regions including Henan, Jiangxi, Hubei, Hunan, Sichuan and Shaanxi, despite the low penetration rates of industrial e-commerce (except for Henan), their proportions of online purchases and sales are higher among all the provinces and municipalities, especially in terms of online purchases. Among them, online purchases of Sichuan and Jiangxi reached 30.25% and 22.60% respectively, significantly higher than the overall level of development of all regions. This has laid a solid foundation for the future development of industrial e-commerce in central and western regions.

Regional imbalance in industrial e-commerce is mainly a result of imbalanced economic development among regions. There are two main factors. First, the economic development is the foundation of ecommerce development, to provide infrastructure conditions and application environment. Therefore, more economically developed regions saw more rapid growth in industrial e-commerce. Second, the development of e-commerce is affected by the awareness of e-commerce in different regions. Ecommerce itself is an innovative, knowledge-intensive, and modern business model, and its level of development is closely related to the internal factors such as enterprises' modern management awareness, level of informatization and human resources as well as external factors such as market conditions. The regions with more advanced awareness of e-commerce have found it easier to integrate its industry with the e-commerce. In addition, as China boasts a vast territory, and sees unbalanced economic development among the regions, there are significant differences in the industrial structures as well as essential conditions and requirements on e-commerce development, resulting in the large gap in terms of e-commerce development between the western regions and small and medium cities and, the eastern coastal areas and big cities.

4.2.3Large and medium industrial enterprises have higher level of e-commerce development

The level of e-commerce development of an industrial enterprise is closely related to its scale. As shown in Figure 4-5, along with the gradual expansion of the scale of industrial enterprises, the penetration rates of e-commerce purchases and sales are rising; that is, there is a significant positive correlation between the scale of an enterprise and its application level of e-commerce. For example, the penetration rates of e-commerce purchases and sales of small industrial enterprises with less than 300 employees were 34.74% and 35.92% respectively, while those of large industrial enterprises with more than 10,000 employees increased to 52.77% and 57.02% respectively.



Figure 4-5 E-commerce penetration rates of industrial enterprises of different scales

In terms of the proportion of online purchases, there is still a positive correlation between the scale of industrial enterprises and the level of e-commerce application, which means industries with smaller scale have lower proportion of online purchases. For example, small enterprises with less than 300 employees had a proportion of online purchases of 2.70% only, ranking last in all types of industrial enterprises. On the other hand, the higher the scale of industrial enterprises, the larger the proportion of online purchases. For example, the proportion of online purchases of large industrial enterprises with more than 10,000 people reached 46.02%, ranking first among all types of industrial enterprises (see Table 4-4).

Table 4-4	Proportions of online purchases and sales of industrial enterprises of different scales and rankings
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Ranking	Proportion of online purchases		Proportion of online sales	
	Enterprise scale	Proportion (%)	Enterprise scale	Proportion (%)
1	More than 10,000 people	46.02	5,000-10,000 people	3.13
2	300-1,000 people	11.79	Less than 300 people	2.73

Data source: China Service Platform for Integration of Informatization and Industrialization

Continued

Ranking	Proportion of online purchases		Proportion of online sales	
	Enterprise scale	Proportion (%)	Enterprise scale	Proportion (%)
3	5,000-10,000 people	8.17	1,000-5,000 people	1.42
4	1,000-5,000 people	7.87	300-1,000 people	0.88
5	Less than 300 people	2.70	More than 10,000 people	0.85
	Overall	20.76	Overall	1.32

Data source: China Service Platform for Integration of Informatization and Industrialization

4.2.4Development level of industrial e-commerce is positively correlated to the enterprises' level of integration of informatization and industrialization

At present, the integration of informatization and industrialization of industrial enterprises in China can be divided into four stages: initial construction, individual coverage, integrated improvement and innovative breakthroughs; it is closely related to the level of e-commerce application. As shown in Figure 4-6, the industrial enterprises with higher level of integration of informatization and industrialization have higher e-commerce penetration rates; i.e., there is a significantly positive correlation between the level of integration and the penetration rate. For example, in the industrial enterprises at the stage of initial construction, the penetration rates of e-commerce purchases and sales were only 15.78% and 18.15% respectively, while in those at the stage of innovative breakthroughs where the integration of informatization and industrialization reaches the highest level, the penetration rates of e-commerce purchases and sales came to as high as 86.94% and 80.92% respectively.





Data source: China Service Platform for Integration of Informatization and Industrialization

In terms of the proportions of e-commerce purchases and sales, the level of e-commerce application is also positively correlated to the level of integration of informatization and industrialization of industrial enterprises, which means that the higher the level of integration of informatization and industrialization, the wider the application of e-commerce, and the higher the proportions of on-line purchases and sales (see Table 4-5). For example, the industrial enterprises at the stage of initial construction have online purchases and sales significantly lower than the overall level of industrial enterprises, ranking last in all types of industrial enterprises, while the proportions of online purchases and sales are remarkable for industrial enterprises at the stages of integrated improvement and innovative breakthroughs. The proportion of online purchase of enterprises at the stage of integrated improvement reached 43.09%, and the proportion of online sales was 53.97%, ranking first in terms of development stage of industrial enterprises respectively.

Ranking	Proportion of online purchases		Proportion of online sales	
	Development stage	Proportion (%)	Development stage	Proportion (%)
1	Integrated improvement	43.09	Innovative breakthroughs	53.97
2	Individual coverage	12.11	Integrated improvement	11.12
3	Innovative breakthroughs	8.66	Individual coverage	0.37
4	Initial construction	0.21	Initial construction	0.11
	Overall	20.76	Overall	1.32

Table 4-5 Proportions of online purchases and sales of industrial enterprises at different stages of integration of informatization and industrialization

Data source: China Service Platform for Integration of Informatization and Industrialization

4.3 Major characteristics of the development of industrial e-commerce

4.3.1 Platforms for centralized purchase and distribution have brought advantages in coordinated development

Along with the shift from industrialization to internet thinking, traditional industrial enterprises, especially those large and medium ones, have engaged in e-commerce, and accelerated their transformation.

On the one hand, large industrial enterprises have set up internet platforms for centralized purchase and distribution in succession; as a result, they have enhanced their coordination and competitiveness in purchase activities, reduced purchase costs and improved the level of product distribution and aftersales services. For example, Sinopec Group built on the basis of its actual conditions for materials purchase and supply, the e-commerce platform, www.epec.com, which integrates the functions of purchase and sale, and set a specialized process for B2B material procurement covering functions including membership management, merchandise control, order management, transaction evaluation and operational services; there are more than 700,000 products under 2,055 types which can be classified into 13 categories of material goods in trading, including steel, coal, oil refinery agents and oilfield chemical agents, packaging materials, labor protection supplies, sundry goods, special petrochemical equipment, electronic products and components, low-voltage electrical components and accessories, communications equipment, general instruments, special tools, and fasteners. Since the official launch on April 1, 2015, www.epec.com has helped reduce the purchase and supply costs for materials substantially, and promoted the sunshine purchase.

On the other hand, large industrial enterprises has, through self-built e-commerce platforms, promoted the integration of e-commerce and their internal business and management information systems, and achieved rapid integration of upstream and downstream information as well as leadership for small and medium enterprises, resulting in facilitation of coordinated development of the supply chains and innovation in business models, thus gaining new competitive advantages in the informatization environment. For example, Beigi Foton Motor has built a public e-commerce platform based on the supply chain collaboration in the auto industry by taking its original model of e-commerce supply chain as the foundation and integrating information systems for sales, production, procurement, finance and after-sales service, to provide efficient and available information support for assembly plants, suppliers and distributors in respect of production planning, resource procurement, logistics and distribution, after-sales service, and financial services, and achieve business integration of logistics information services, vehicle sales, after-sales service and the supply chain collaboration for manufacturing. This public platform will, upon establishment, integrate more than 10,000 vendors and related enterprise groups, basically covering all the nodes from upstream to terminal on the supply chain of major Chinese discrete manufacturing enterprises, and will greatly change the current situation of repeated investment and waste in supply chain e-commerce of domestic enterprises. It is estimated preliminarily that this public platform will help auto enterprises save costs of more than RMB 1 billion upon implementation.

4.3.2Small and medium industrial enterprises continue to expand e-commerce application by relying on third-party platforms

Because of lack of resources and advantages for building their own platforms, small and medium industrial enterprises have chosen to rely on integrated e-commerce platforms (such as Alibaba, HC360.com, and DHgate.com), vertical platforms targeting at industry segments and focusing on trading of industrial chain products (such as zhaogang.com and banksteel.com) or third-party platforms for any single products (product platforms focusing on only one type of industrial products) to explore upstream and downstream customer groups, expand marketing channels, and develop new markets. At the same time, small and medium industrial enterprises have made full use of innovative services provided by third-party e-commerce platforms such as integrated online financing, supply chain management and information consulting, and broken the barriers in each industrial chain link, generating new business models and new opportunities, to continuously improve work efficiency, optimize business processes, and facilitate transformation and upgrading. For example, Guangzhou Laikebao Chemical Industry Co., Ltd. started to operate on HC360.com in October 2014, and the total amounts of its online transactions reached RMB 707,000 in January 2015 and RMB 423,600 in February of the same year respectively.

4.3.3Industrial e-commerce platforms continue to innovate service systems and extend servicerelated functions

Comprehensive e-commerce platforms such as 1688, HC360.com, www.DHgate.com and Madein-China.com have successively explored the transformation from a platform for information release to one providing trading services, supply chain finance and other services. For example, TrustPass provides online trading services for the small and medium-sized enterprises engaged in domestic trade; Huopin provides wholesale group-purchase services and taogch.com provides customized processing services for e-commerce sellers and factories.

E-commerce service platforms for industrial sectors serve as an important supplement to the supply chain collaboration of industrial enterprises, and compared with traditional offline modes, boast huge advantages in online procurement of indirect means of production, online sales of off-channel products and online auction of used equipment, etc.. With the main aim to support the circulation of industrial products, e-commerce service platforms for specific industries provide online transaction, logistics services, financial services, processing, distribution and other services, becoming vital foundation and effective guarantee for the development of industrial e-commerce. The business scope of industrial e-commerce service platforms such as Ouyeel, isuwang.com, www.yimei180.com and SMM has been expanded to online trading, logistics and payment by credit.

4.3.4Industrial e-commerce helps boost the implementation of "Made in China 2025" strategy

The Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force ⁽¹⁾ set out clearly that e-commerce shall be used to innovate the organization modes for industrial production; the Circular of the Ministry of Industry and Information Technology on Issuing the Action Plan for the Implementation of the Guiding Opinions of the State Council on Actively Promoting the "Internet Plus" Initiative (2015-2018) ⁽²⁾ has arranged the initiatives for collaborative innovation and interactive development regarding industrial e-commerce platforms, third-party logistics, internet finance and other business.

With strong support from national policies, the industrial e-commerce has grown rapidly in China and become an important driving force for accomplishing the "Made in China 2025" strategy. Major industrial enterprises in China have made in-depth use of e-commerce. For example, Haier Group established the "whole flow parallel interactive innovation ecosystem", which extracted common demand from personalized needs through the open internet innovative platform and formed an efficient connection between user requirements and global first-class innovative resources. Sany Group independently developed the ECC (Enterprise Control Center) system, integrated the big data and the

^o State Council. Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (September 18, 2015) [February 26, 2016]. http://www.gov.cn/zhengce/content/2015-09/29/content_10204.htm.

 ^a Ministry of Industry and Information Technology. Circular of the Ministry of Industry and Information Technology on Issuing the Action Plan for the Implementation of the Guiding Opinions of the State Council on Actively Promoting the "Internet Plus" Initiative (2015-2018) [EB/OL] (November 25, 2015) [February 26, 2016]. http://www.miit.gov.cn/newweb/n1146290/n4388791/c4538291/content.html.
 • 96 •

internet of things, and had more than 200,000 devices accessed into the system in accumulation, enabling the devices across the world to send data back to ECC from time to time through various sensors mounted on the devices.

The digital platform for industrial chain of internal combustion engine set up by Zibo Diesel Engine Parent Company, effectively synergized more than 1,100 machinery suppliers and over 2,400 user groups on the internal combustion engine market, and established a unique supply chain management system complying with market demands. In Guangdong, the "industry cloud" platforms at the city level have been built, and a system of distinctive cloud platform services closely connected with Guangdong Industry Cloud at the provincial level has taken shape initially; 100 key enterprises started to operate on the public service platform of "Guangdong Industry Cloud" first, leading more than 5,000 small and medium enterprises to on-line application; there were about 500 service products provided, with enterprises being served for more than 20,000 times.

4.3.5Pilot areas for industrial e-commerce are thriving

In 2015, as more industrial enterprises in China applied e-commerce and pilot areas for industrial ecommerce expanded, the core competitiveness of large leading enterprises was improved, and a number of new business development models were generated, thus enhancing the survival and development capabilities of small and medium enterprises. The scale of industrial e-commerce has expanded year on year, with increasingly more enterprises engaged in e-commerce business. As a result, social resources from upstream to downstream of industrial chains pooled through industrial ecommerce are becoming more abundant, and the quality and benefit of industrial e-commerce development has improved continuously.

As of 2015, in Beichen District, Tianjin, there were over 800 enterprises using Alibaba's B2B platform for domestic trade and 150 enterprises using the B2B platform for cross-border e-commerce. In Xiaonan District, Xiaogan City, Hubei, there were 232 industrial enterprises reaching the designated size, of which 180 have been engaged in e-commerce activities, with the GMV for the first three quarters amounting to RMB 4.5 billion and for the year RMB 6 billion, up by 26% year on year. In Anyang City, Henan, 900-odd industrial enterprises have conducted e-commerce business, with about 5,000 stores opened on e-commerce platforms; the city had a GMV of more than RMB 9 billion, increasing by 75% year on year. The value of industrial sales of Baoshan District of Shanghai was RMB 115.5 billion for the period from January to October 2015, whereas the GMV reached RMB 77.9 billion, of which B2B transactions accounted for more than 98% with a value of RMB 76.7 billion, increasing by 21.7% year on year. In particular, e-commerce transactions for iron and steel and other bulk commodity saw rapid growth, with the percentage for transaction scale on the rise; relevant key enterprises achieved a GMV of RMB 72.8 billion, accounting for about 93.5% of the total GMV in the district.

4.4 Development trend of industrial e-commerce

4.4.1 Manufacturing and e-commerce will become further integrated

As the economic and social development has entered a new stage currently, the integration of real economy and internet economy or virtual economy has become the trend of development at home and abroad. According to the Report on the Work of the Government (2015), in its current stage of development, China has to simultaneously deal with the slowdown in economic growth, make difficult structural adjustments, and absorb the effects of previous economic stimulus policies. In 2014, the manufacturing industry accounted for nearly 40% of China's GDP, generating about RMB 26 trillion and thus making China the world's largest manufacturer. Among the 500-odd categories of industrial products, China has topped the world in more than 220 categories. This has laid a powerful foundation for China's industrial and economic development. Without the manufacturing industry, advanced service industry will be an illusion; thus, the manufacturing industry is fundamental to a nation and shores up the nation. On the other hand, the development of e-commerce has obtained remarkable achievements in recent years. Two landmark e-commerce enterprises in China have turned into top 10 internet companies in the world. Through the rapid development and constant innovation regarding ecommerce, more and more traditional enterprises have recognized the urgency in transformation. In view of the development trend, in 2016 and even the coming years, traditional industrial enterprises will. under the guidance of the "Made in China 2020" strategy and the "Internet plus" Initiative, make significant breakthroughs in e-commerce transformation, becoming the powerful engine for the development of China's e-commerce and even national economy.

4.4.2Industrial e-commerce helps innovate manufacturing modes

On the one hand, industrial e-commerce will facilitate internet collaborative manufacturing. Focusing on the sharing between the industrial e-commerce and enterprises' systems of management and business information as well as the whole life cycle management of products, enterprises will achieve information sharing, quality control, product traceability and accurate service in the whole process including product research and development, manufacturing, logistics and distribution, use and maintenance, recovery and disposal. A number of industrial e-commerce platform will arise with a focus on improving internet collaboration along the industrial chain and based on the horizontal integration of systems for interenterprise research and design, customer relationship management, supply chain management and operational services, to accelerate the coordination in respect of design, manufacturing, business and resources among enterprises on the upstream and downstream of the industrial chains. On the other hand, industrial e-commerce will facilitate customization. Customer experience centers, online design platforms and e-commerce platforms will be set up in home appliances, fashion, furniture and other industries, to develop a customization mode featuring dynamic knowledge of and real-time response to consumers' requirements. In aircraft, vessel, equipment and related industries, an open platform for customization shall be built based on the internet; key product database shall be available for sharing; and enterprises shall improve the capabilities in modular design, flexible manufacturing and customized services related to their high-end products and equipment.

4.4.3Platform for bulk commodity trading and mobile e-commerce will become new hot spots in industrial e-commerce

The development of B2B e-commerce platforms for bulk commodities and industries will focus on combining e-commerce with the spot market, online and offline transactions, assemble more enterprises on the upstream and downstream of industrial chains to the platforms, pool off-line logistics and warehousing resources together, and based on the supply chain financing services, achieve the integration of business flow, logistics, information flow and capital flow, thus speeding up the economic recovery on a whole. In addition, with the rapid growth of the number of intelligent terminals, mobile e-commerce will be the front for which e-commerce enterprises will fight in the future. As to how to promote the application of mobile e-commerce in marketing and customer relationship management of industrial enterprises, the stronger support from M2M technology to product after-sales service, full life-cycle management and logistics information services will become the new hot spot of development of industrial e-commerce in future.

4.4.4E-commerce will help greening China's industry in all respects

With the rapid progress of industrialization, resources and environment will restrict the industrial development to a larger extent. Because of its environmental characteristics such as low carbon, low energy consumption and low emissions, e-commerce has provided a new channel for the industry to cope with resources and environmental challenges. On the one hand, industrial e-commerce makes traditional business processes electronic and digital, and replaces material flow with electronic flow. This does not only significantly improve the efficiency of use of material resources, but also greatly reduce the possibility of transaction-related energy and resource consumption in respect of traffic, travel, logistics, transportation, warehousing and paper, thus effectively minimizing carbon emissions. On the other hand, green recycling and trading platforms have developed rapidly on the basis of industrial e-commerce. Through combination of online and offline resources, industrial O2O platforms for renewable resources have been built to provide opportunity for vast enterprises engaged in renewable resources and waste utilization as well as recycling of old and waste materials to contact with each other, thereby greatly improving the efficiency of resource use in the manufacturing industry and promoting the green transformation and upgrading of the manufacturing industry.

Chapter 5 Special Report on the Development of Agriculture-related Ecommerce

2015 saw the rapid development of agriculture-related e-commerce. The State issued a number of documents on agriculture-related policies in a short time; e-commerce enterprises expanded their business into the rural areas in succession; more talents returned to the rural areas; exploration on the development models was thriving; all those marked the opening of a new chapter in the rapid development of agriculture-related e-commerce. This special report presents the development of agriculture-related e-commerce in China in 2015 in terms of rural areas, agriculture, and farmers.

5.1 Current status of the development of agriculture-related e-commerce

5.1.1 Building of rural network

With five years' development, China has sped up internet development in the rural areas. In 2011, there were only 136 million netizens in rural areas, accounting for 26.5% of the total number of netizens. At the end of December 2015, the rural netizens reached 195 million, accounting for 28.4% of the total number of netizens[®]. As the number of urban netizens in first and second-tier cities has slowed down, the growth potential in future lies in the rural population of 618 million (2014). Figure 5-1 shows the changes in the proportion of rural netizens in all the netizens in China.



Figure 5-1 Changes in the proportion of rural netizens in all the netizens in China

Source: China Internet Network Information Center

¹⁰ China Internet Network Information Center. The 37th Statistical Report on Internet Development in China [R/OL] (January 22, 2016) [April 23, 2016].

According to the statistics of the Ministry of Industry and Information Technology, as of March 2015, 93.5% of administrative villages in China have had access to broadband. The pace of optical-cable-to-the-village and fiber-to-the-home projects in rural areas has been quickened. By the end of 2015, Jiangsu has achieved effective coverage of rural data hot spots and full coverage of all 3A-level or higher level scenic spots, with population coverage rate of 85% and coverage rate of demand for data services up to 95%; in Sichuan, the index of "rural families with 4M or more broadband access capability" was 99.4%; in Hunan, "Six Projects" have been implemented, with a variety of initiatives taken to effectively address the issue of information and communication network coverage in poverty-stricken areas; and in Hainan, the number of rural broadband users grew by 20.9% year on year, surpassing the development of urban broadband for the fifth consecutive year. After the scale of online shopping market exceeded RMB 1 trillion, the growth in the urban online shopping market has slowed down, whereas the changes in the network communication in rural areas have laid a solid foundation for the continued growth of e-commerce.

However, optical network in rural areas is still insufficient all around the country. Many remote villages still do not have broadband access, lagging behind in internet development; information websites, data platforms and applications related to rural areas, agriculture and farmers are fewer, and the "information gap" between urban and rural areas is still evident; and the application of e-commerce information in rural areas cannot match the demand. At the same time, the levels of development in basic e-commerce construction were extremely uneven, varying significantly among different rural areas. To this end, the Ministry of Industry and Information Technology launched the special action of "Broadband China" in 2015, making it clear to synchronically speed up and upgrade the network in urban areas and promote network service in rural areas. While the continuous popularization and upgrade of broadband in urban areas facilitates the ongoing improvement in the overall level of broadband in China, more public financial support shall be given to the broadband development in rural areas, in an attempt to narrow the rural-urban "digital gap" ⁽⁰⁾. In 2015, broadband construction in rural and remote areas was supported by special funds.

5.1.2E-commerce for agricultural products

Since 1995, with 21 years' development, a multi-level agriculture-related e-commerce market system and network system have taken shape, covering agriculture-related online futures trading, agriculture-related e-trading of bulk commodities, agriculture-related B2B e-commerce sites, and agriculture-related e-tailing platforms.

(1) Online futures markets for agricultural products. In 2015, the total volume of online futures transactions for commodities amounted to RMB 136.47 trillion, and there were 21 varieties of agricultural futures, with a turnover of RMB 48.7 trillion, accounting for 36% of the total volume of the commodity futures market $^{\circ}$.

(2) E-trading markets for bulk agricultural commodities. In 2015, the number of trading markets for bulk agricultural commodities nationwide reached 402 (agriculture, forestry, animal husbandry and fishery markets), accounting for about 40% of the 1,021 trading markets for bulk commodities in China, with the GMV of agriculture-related e-commerce exceeding RMB 20 trillion[®].

(3) Online trading market for fresh produce. The volume of online trading market for fresh produce reached RMB 54.4 billion in 2015, up by 87.7%, and is expected to exceed RMB150 billion in 2018[®].

E-commerce market for agricultural products for food ingredients. Since 2012, B2B platforms for food ingredients supply have emerged; and in 2014 and 2015, e-commerce for agricultural products used as

^o Ministry of Industry and Information Technology. Opinions on the Implementation of the Special Action for "Broadband China" Strategy in 2015 [R / OL] (May 11, 2015) [April 23, 2016]. http://news.xinhuanet.com/newmedia/2015-05/11 / c 134227649.htm.

[®] China Futures Association. Transactions on Futures Markets Nationwide in December 2015 [R / OL] (January 4, 2016) [April 23, 2016].

http://www.cfachina.org/yjycb/hysj/ydjy/201601/t20160104_1919395.html.

[®] Assorted based on statistical data from the China Bulk Commodity Circulation Exchange Association of CFLP.

[®] Hong Tao. Report on the Development of E-commerce for Agricultural Products in China in 2015 [R]. April 11, 2016.

food ingredients became popular, with the main aim to provide goods delivery services for downstream restaurants. E-commerce operators engaged in this field have acquired the bargaining power by providing centralized purchase for multiple restaurants and offered logistics services at the same time, thus helping the downstream restaurants reduce costs and improve the economic and social efficiency of the catering industry.

(4) Fairs for online purchase and sales of agricultural products. In 2015, the Ministry of Commerce organized the summer-and-autumn and winter fairs for online purchase and sales of agricultural products, with the trading volume totaling RMB 7.66 billion. Specifically, at the summer-and-autumn fair for online purchase and sales of agricultural products, commerce departments of 355 counties (cities and districts) under 28 provinces (autonomous regions and municipalities directly under the Central Government) submitted 436,000 pieces of information on agricultural product supply and demand, involving 768 types of agriculture products; 470,000 tons of agricultural products were sold, with a turnover of RMB 3.68 billion. At the winter fair, 296 counties (cities and districts) under 28 provinces (autonomous regions and municipalities directly under the Central Government) submitted 551,000 pieces of information on agricultural products; 475,000 tons of agricultural products were sold, with a turnover of RMB 3.98 billion.

5.1.3 Development of e-commerce for agricultural materials

Despite the large market of agricultural materials in China, e-commerce in this field lags behind. In particular, the capacity of China's agricultural materials market exceeds RMB 2 trillion, of which RMB 750 billion is for fertilizers, RMB 380 billion for pesticides, RMB 600 billion for agricultural machinery and RMB 350 billion for seeds. The e-commerce for agricultural materials has developed very slowly. Although e-commerce for agricultural materials was fewer, with less turnover and smaller proportion, it is a blue sea with great potential for development.

In 2008, the enterprises with branded agricultural materials in China began to explore e-commerce, using a variety of modes for e-commerce of agricultural materials, including third-party e-commerce platforms (such as ync365.com and www.16899.com) and platforms operated by agricultural material enterprises on their own (such as Luxi Chemical's mall.lxhg.com and Sinofert's www.maifeiwang.cn). Since 2014, agri-chemical enterprises have launched their investment plans in the e-commerce field in succession, in order to develop e-commerce for agricultural materials by combining online and offline modes. In 2015, as Alibaba, JD.com, Noposion, Kingenta, ync365.com and other "Internet plus" and "Plus Internet" enterprises took actions suddenly, the e-commerce for agricultural materials boomed. 2015 can be described as the starting year of e-commerce for agricultural materials. In the year, the GMV of e-commerce for agricultural materials in the country exceeded RMB 15 billion, reaching 5 times that in 2014[©].

Some new modes of operation have also been explored for e-commerce for agricultural materials. For example, ync365.com adopted the B2B2C model, with chemical fertilizers, seeds, pesticides, agricultural machinery, etc. operated on its platform as well as provision of other value-added services. Njw88.com used the B2B mode mainly, targeted at agricultural material retailers, worked to connect online and offline sales of agricultural materials, and strengthened the channel management for brands. Ttq.com integrated upstream manufacturers for agricultural materials and midstream distributors and retailers, and optimized the industrial chain links, to help users choose the goods wisely and reduce procurement costs.

5.1.4 Development of e-commerce for daily necessities in rural areas

Whereas the online shopping penetration rates in first and second-tier cities are close to 100%, the online shopping sector in third and fourth-tier cities are still exuberant. In 2015, the turnover of online shopping in rural areas around the country reached RMB 353 billion, increasing by 96% year on year[®], showing good development momentum.

By the end of 2015, China had more than 30,000 agriculture-related websites, 1.18 million new online stores, and has built 250,000 village e-commerce service sites in 1,000 counties nationwide.

In 2015, Alibaba launched the "Cuntao" scheme to vigorously promoting the "plan for establishing 1,000 county service centers and 10,000 village services stations", and proposed to accomplish the plan within three to five years by investing RMB 10 billion, so as to benefit 70% of the country's rural population. SF Express also sped up its layout of logistics network in rural areas around the country,

^o Hong Tao. Report on the Development of E-commerce for Agricultural Products in China in 2016 [R]. April 11, 2016.

[®] Li Xinping. Online shopping reached RMB 353 billion in rural areas last year and cold chain transport and information infrastructure were bottlenecks [R / OL] (April 9, 2016) [April 23, 2016]. http://news.xinhuanet.com/politics/2016-04/09/c 128877654.htm.

using a two-way flow of commerce and logistics-takes-all strategy. Its logistics network has covered nearly 40% of villages and towns in China. In addition, it actively encouraged its employees to return home to start business, so as to drive the extension of service outlets; set up village sites to deliver parcels directly into the hands of farmers; and used the village sites to provide important support for logistics and shipment of local specialties ordered through "Chengxianggou".
According to the data on general merchandise market from 1688.com, a website owned by Alibaba, the consumption in rural areas was mainly concentrated in cigarettes and liquor, non-staple foodstuffs and cleaning products. Targeting at the great potential of the consumer market for daily necessities in rural areas, 1688.com, Lelecheng for daily necessities wholesale and other e-commerce platforms placed the small wholesale and retail stores often seen in rural areas everywhere on the internet, to solve the trouble met by rural consumers in their daily life such as shortage and few choice of daily necessities.

Lecuntao.com Inc. is a rural e-commerce platform originating in Shanxi and gaining recognition nationwide. With respect to the high logistics costs in rural areas, Lecuntao developed a sales model more suitable in the rural areas - Lecuntao fairs on days with the figure of 6. It transformed grocery stores in villages and set up management centers in 516 counties of 24 provinces, autonomous regions and municipalities directly under the Central Government. With experience stores in 60,000 villages, Lecuntao became the e-commerce platform with most experience stores in rural areas, surpassing Alibaba and JD.com.

5.1.5 Development of e-commerce for poverty alleviation in rural areas

In 2015, the Ministry of Finance and the Ministry of Commerce carried out the integrated exemplary building of rural e-commerce in 200 counties, and 82.5% of the counties were located in central and western regions, with the proportion of poverty-stricken counties higher than 43.5%. RMB 3.7 billion would be allocated from the central finance as a special fund to support the development of rural e-commerce, particularly in southern Jiangxi, eastern Guizhou, northern Shaanxi and other old revolutionary base areas. In the use of funds, priority would be given to the establishment of three-level (county, township and village) logistics and distribution system, in order to cultivate the local ecological environment of rural e-commerce. National policies were a powerful guarantee for the promotion of rural e-commerce.

By the end of September 2015, Village Taobao had been operated in 31 state-level impoverished counties and 42 provincial ones. By the first half of 2015, 832 state-level poverty-stricken counties had a total of 19.7265 million users and 292,700 sellers on Alibaba's retail platform. Alibaba planned to invest RMB 10 billion in three to five years to establish 1,000 county operation centers and 100,000 village service stations nationwide. Through breaking the bottlenecks in logistics and information flow, it attempted to fill the gap in urban and rural areas, extending the e-commerce network to cover 1/3 of the counties and 1/6 of the rural areas across the country.

JD.com also planned to open 500 service centers at the county level within the year, in order to accelerate the its market layout in third to sixth-tier cities, districts, counties and villages. According to its plan for going into the villages recently released, JD.com would gradually improve its village distribution system, recruit rural partners, support e-commerce platforms and traditional trade enterprises, and establish "JDbang" service stores for large home appliances, as well as layouts in many other aspects. Suning Commerce and the Office of Poverty Alleviation and Development under the State Council signed in Beijing a national strategic cooperation framework agreement on poverty alleviation through rural e-commerce. The two sides would cooperated in "Double Hundred Demonstration Projects on Poverty Alleviation through E-commerce", O2O exhibition area for poverty alleviation through e-commerce, "October 17 Shopping Festival for Poverty Alleviation", and training of rural e-commerce personnel, so as to benefit about 104 poverty-stricken districts and counties as well as 2.34 million poor rural households nationwide.

Many regional enterprises were also involved in poverty alleviation through e-commerce. For example, Yunfeihewu Agriculture and Animal Husbandry Technology Co., Ltd., a company dedicated to alleviating poverty through e-commerce for a long time was building an APP platform called "Yunlianxiangcun", providing training of rural e-commerce personnel, rural finance and other services. Therefore, difficulties in logistics, credit and training would be solved to make poverty reduction more accurate and effective.

During the poverty alleviation through e-commerce, a number of new modes have been explored in different regions. For example, Shanyang County, Shaanxi cooperated with many merchants and supermarkets to establish an e-commerce sales platform relying on its rich and high-quality agricultural products to promote the mode of online small-package sales; Lecuntao in Shanxi implemented two-way circulation by delivering industrial products into rural areas and agricultural products into urban areas, to reduce logistics costs and procurement costs; Changsha Qink Electronic Agriculture Market Co., Ltd. in

Hunan combined its online platform, regional e-commerce service stations and community stores; all the above modes have achieved good effects.

5.2 Characteristics of the development of agriculture-related e-commerce

5.2.1 Multiple policies were issued to promote pilot programs and demonstration projects related to agriculture-related e-commerce

In 2015, 75 policies on promoting the development of agriculture-related development were issued in China in succession. The No.1 Central Document of 2015 proposed strengthening legal development in rural areas and supporting e-commerce, logistics, trade and financial enterprises to engage in the building of e-commerce platforms. Comprehensive demonstration regarding the promotion of e-commerce in the rural areas would be carried out, and poverty-alleviation through e-commerce was listed as one of the Ten National Projects on Targeted Poverty Alleviation.

In 2014 and 2015, the Ministry of Commerce and the Ministry of Finance conducted comprehensive demonstration projects on promoting e-commerce in 256 counties, allocated RMB 4.8 billion in accumulation from central finance, and attracted about RMB 80 billion of private investment, driving a large number of e-commerce enterprises to accelerate their layouts in the rural market. Now, e-commerce has covered more than 1,000 counties and nearly 250,000 villages.

In 2015, the Ministry of Agriculture determined to add 51 pilot counties (cities and districts) in the 10 provinces (municipalities) that had carried out pilot programs, and add 16 pilot provinces including Tianjin and 43 pilot counties (cities and districts), namely 94 pilot counties (cities and districts) in total, which would be the second batch of pilot counties to bring information to villages and households.

5.2.2It was easier to get financing for agriculture-related e-commerce

In 2015, a small peak emerged in respect of agriculture-related e-commerce. Womai.com, beilai.com, Dmall and other similar platforms obtained investment of more than USD 100 million respectively (see Table 5-1). Meanwhile, enterprises engaged in the e-commerce for farm products gained financing from multiple channels, achieving rapid growth in the total amount of financing. This has provided strong support for the development of e-commerce for farm products.

Enterprise	Date	Investor	Investment amount	Unit
Womai.com	2015-10	Baidu and Taikang Life Insurance Co., Ltd.	200 million	USD
Beilai.com	2015-01 2015-12	Banyan Capital, CDH Investments, and Joyoung	Several millions 100 million	USD
Fruit Day	2015-05	JD.com, Cuoming Investment, and SIG	70 million	USD
Yqphh.com	2015-04 2015-12	IDG IDG and Banyan Capital	Several millions 50 million	USD USD
Dmall	2015-04	IDG	100 million	USD
1mxian.com	2015-01 2015-12	Sequoia Capital www.kunlun.com	Several millions 15 million	USD
Missfresh	2015-01 2015-12	GX Capital and Tencent Zhejiang Chuangyuanjingtouyuan	5 million 200 million	USD RMB
Fields	2015-05	Sun Art Retail	Tens of millions	RMB
Feiniu.com	2015-01	Sun Art Retail	500 million	RMB
Chunbo.com	2015-02	Zhuhai Dahai International	300 million	RMB
Fresh Market	2015-05	Tiantu Capital and Sharelink Capital	180 million	RMB
Wochu.cn	2015-03 2015-12	New Horizon Capital, Principle Capital South Memory	Tensofmillions40 million	RMB

Table 5-1 List of financing obtained by e-commerce operators for fresh agricultural products

Continued

Enterprise	Date	Investor Investmamour		Unit
Xuxian.com	2015-11	IDG and Chen Hai capital	Tens of millions	RMB
Beequick	2015-03 2015-09	Hillhouse Capital (lead investor), and Sequoia Capital Hillhouse Capital, Eastern Bell Venture Capital, Angel Capital, and Sequoia Capital	20 million 70 million	USD USD
500jia	2015	Angel investment	30 million	RMB
Cailanwang	2015	Series A financing	Tens of millions	RMB
Big Mouth Fish	2015	Angel investment Tens millions		RMB
Amor Flora	2015	Series G financing	Over 100 million	RMB
Yijia117.com	2015	Series A financing	51 million	RMB
Bingo Fresh	2015	Pre-series A financing	Tens of millions	RMB
Miaoshenghuo	2015	Series A financing 5 million		USD
Pagoda	2015	Series A financing 400 million		RMB
Farm Girl	2015	Series A financing 80 million		RMB
Mr. Food	2015-3	Shresource, Ping An Ventures, and Zhen Fund	Several millions	USD
54nm.cn	2015-5	Progen and Tengtou Holding	ogen and Tengtou Holding 20 million	

Source: Zero2IPO Research Center. 2015

5.2.3 Building of Taobao Villages, Towns and Counties entered new stage

From 2009 to 2015, Taobao Villages experienced four stages: germination, growth, large-scale replication, and innovation in modes; and by the end of 2015, there were 780 Taobao Villages nationwide, increasing by 268% year on year, covering more than 200,000 active online shops (see Figure 5-2). Those Taobao Villages located in 17 provinces, autonomous regions and municipalities directly under the Central Government, and Zhejiang, Guangdong and Jiangsu ranked top three in terms of the number of Taobao Villages. Specifically, there were 280, 157 and 127 Taobao Villages in Zhejiang, Guangdong and Jiangsu, respectively.



Figure 5-2 Growth of Taobao Villages in China 2009-2015

Source: Ali Research Institute. 2015

As of September 20, 2015, JD.com had completed annual development plan for rural e-commerce formulated in early 2015 in advance, by opening nearly 600 county-level service centers, recruiting about 100,000 rural employees, and putting 1,000 JDbang service stores into operations, with its services covering nearly 300,000 administrative villages.

Suning Commerce announced to build 1,500 suning.com service stations in 2015, and has planned to build 10,000 in five years to go into villages around the country, trying to break the existing barriers in respect of development of channels. HC360.com, China Post and China Telecom also actively explored online and offline cyberspace on the rural market.

5.2.4Cooperative e-commerce rose suddenly

On November 5, 2015, GXYJ.com, the e-commerce platform for supply and marketing cooperatives nationwide was formally launched. This platform focuses on the rural e-commerce and e-commerce for agricultural products, and provides complete online trading and service functions. Specifically, the trading function mainly involves the traditional business fields of supply and marketing cooperatives related to agricultural products, agricultural means of products, daily consumer goods, and renewable resources, in the modes of B2B block trading, wholesale trading, B2C retailing trade, O2O online trading and other trading modes; while the service function covers a variety services related to payment and settlement, financial services, logistics and integration, quality certification and tracing of origin of place, provision of services and convenience to famers, technical assistance and training.

5.3 Development trend of agriculture-related e-commerce

5.3.1 Agriculture-related e-commerce has grown rapidly

With the continuous development of agriculture-related e-commerce, the proportion of GMV of rural ecommerce in the sales of rural products will continue to rise, and it is expected in the next five years, the GMV of ecommerce for agriculture products in China will account for 5% of the turnover of trading of agricultural products. Meanwhile, with the wider application of innovative technologies such as integration of tri-networks, internet of things, big data, and cloud computing, agriculture-related ecommerce will be developed in diverse forms, forming an organic whole together with intelligent agriculture, logistics and consumption, increasingly improving the environment for rural e-commerce day by day.

Along with the development of e-commerce industries, professional service providers entered the countryside, and provides services covering supply of goods, warehousing, photography and video recording, image processing, online shop fitting and operation under agency, planning and operation, financing and wealth management, payment, branding promotion and management consulting, personnel training, logistics, and legal services. All mainstream e-commerce modes such as B2B, B2C, C2C, C2B and O2O, as well as micro e-commerce, local life, and cross-border e-commerce have emerged in the field of agriculture-related e-commerce.

As the annual import and export of agricultural products in China reach USD 180 billion, cross-border etrading of agricultural products will play more and more significant roles. Accordingly, the rapid growth in cross-border e-commerce drives the transformation and upgrade of rural e-commerce. A large number of cross-border e-commerce sellers have distributed their production sites in rural areas. This, on one hand, help rural e-commerce achieve product and market upgrading; and on the other hand, plays the cost competitiveness of cross-border e-commerce, enabling rural e-commerce and crossborder e-commerce to grow together.

In future, cross-border e-commerce will be expanded from the coastal areas to the inland and penetrated from the cities to rural areas; internationalization will become important for rural e-commerce as it is a major pathway to address homogenization to realize upgrading transformation in rural e-commerce.

5.3.2Environment for agriculture-related e-commerce service improved

Along with the development of e-commerce industries, professional service providers entered the countryside, and provides services covering supply of goods, warehousing, photography and video recording, image processing, online shop fitting and operation under agency, planning and operation, financing and wealth management, payment, branding promotion and management consulting, personnel training, logistics, and legal services. All mainstream e-commerce modes such as B2B, B2C,

C2C, C2B and O2O, as well as micro e-commerce, local life, and cross-border e-commerce have emerged in the field of agriculture-related e-commerce.

Efforts have been made to reach the "last kilometer" of rural e-commerce, and speed up the building of e-commerce service stations throughout the rural China. Government, market, social organizations and individuals, will be the provider or intermediary for agriculture-related e-commerce public services. The eco-environment for agriculture-related e-commerce will be improved constantly, and through mobilizing the forces of all parties, the service quality will be promoted, so as to change the traditional operational idea that "farmers should work on the land only".

5.3.3 The industrial chain for agriculture-related e-commerce continues to extend

In order to avoid homogeneous competition, a number of enterprises engaged in agriculture-related ecommerce began to expand their industrial chains, from being retailers into distributors, from simple channel operators into brand owners, from raw material procurement into design, looked for OEM manufacturers, and finally distributed goods to other small e-commerce operators, and gradually established the industrial chain for e-commerce covering vertical levels based on brand owners, wholesalers, retailers as the main players.

Some farmers operated their own processing plants, to produce and distribute products by themselves; while some other farmers were engaged in internet distribution only, responsible for sales and customer services for online shops, and the purchase of goods, production and shipment were handled by the manufacturers in a unified manner. The types of rural e-commerce trading started to change from single e-retailing to compound modes. At the same time, transformation and upgrading of rural commerce could facilitate the development of industries, enabling traditional industries to extend at the ends of the "smiling curve". The level of design was improved to guide product trends and achieve product diversification; extension on the ends meant developing bulk commodity trading of raw materials, single-product e-commerce of intermediate goods, and focusing on design, research and development of finished products, so as to achieve product retail or wholesale on the basis of the existing trading platforms.

5.3.4Online and offline integration regarding agriculture-related e-commerce

In 2016, the wholesale market for agricultural products will play its advantages as offline physical stores in respect of logistics, services, and experience, to promote the integration of physical and virtual market and realize the transformation of the offline physical market.

The wholesale market for e-commerce operators has become an important intermediary organization to connect sellers and traditional sales markets. Consumers often need to various types of products in small scale, whereas agriculture products feature fewer types and large quantity. There is asymmetric information between the demands of e-commerce operators and local suppliers. The wholesale market for e-commerce operators can solve this problem. On the one hand, in the wholesale market, relevant operators purchase goods in multi-types and large quantity and provide products to e-commerce operators in multi-types and small quantity, thus solving the problem of information asymmetry between commodity demand and supply faced by e-commerce operators. On the other hand, in respect of farm products, the storage is the most important link in guaranteeing the product guality; as a result, physical wholesale market provides specialized warehousing and storage, which further reduces the inventory costs and operating risks for e-commerce operators. In addition, more and more rural e-commerce sellers have operated on third-party e-commerce platform, and established direct-selling platforms through OEM and cooperation with offline physical sellers, to further expand sales channels; or used domestic internet platforms such as Wechat business and Wechat to promote their products through social networking platforms. Agriculture-related e-commerce will become a stable economic growth point in the agricultural fields on the strength of the online-offline integration.

5.3.5The government increases support to agriculture-related e-commerce

In 2016, the Ministry of Agriculture will encourage the transformation of qualified grass-roots outlets of supply and marketing cooperatives, rural post offices, village postal stations, and village information service for bringing information into villages and households into rural e-commerce service stations. Big specialized households of crop or animal production, family farms, specialized farmer cooperatives are supported to work with e-commerce platforms, with a focus on promoting e-commerce platforms to set up special area for agriculture-related e-commerce, reducing the platform costs and providing internet banking services, to achieve online sales of "pollution-free, green and organic agricultural products with geographical identification", "well-known, special, quality and novel products" and realize "one village with one brand".

. E-commerce for fertilizers, seeds, pesticides and other means of production will be carried out to promote the distribution of safe means of agricultural production into farm households. Meanwhile, on the basis of the intervals and good opportunities for consumption regarding agricultural products, domestic large and medium-sized enterprises engaged in agriculture-related e-commerce will be organized to conduct special sales activities for fruits, vegetables and other products nationwide. During the activities, e-commerce enterprises will in the principle of break even and multi-win, effectively play the characteristics and advantages of their e-commerce platforms, enabling farmers in the production areas of the agricultural products and vast consumers to share the fruits of "Internet plus agricultural e-commerce". At the same time, vigorous support will be given to other e-commerce enterprises to encourage them to actively carry out online sales of agricultural products via e-commerce platforms.

The Ministry of Commerce will promote the development of agricultural-related e-commerce in the following three aspects:

(1) bolstering areas of weakness, to break the bottlenecks restricting development of the industry. In 2016, the Ministry of Finance and the Ministry of Commerce will continue to further promote the pilot program for rural e-commerce, spend great efforts to solve the issue of "last kilometer" in logistics and distribution, and integrate rural resources, to smoothen logistics channels.

(2) Focusing on upstream, strengthening the role of rural e-commerce in increasing farmers' income, and valuing the upstream channels for agricultural products to entering urban areas from rural areas. Efforts shall be made to achieve organic integration between offline wealth and online e-commerce, broaden the channels for agricultural products going into urban areas, and promote brand establishment and standardization of agricultural products, and increase farmers' income.

(3) Promoting competition, stimulating vitality of market players, and encouraging innovation and growth of e-commerce market players in all regions, paying attention to training of rural e-commerce personnel, and enhancing overall coordination and sharing of resources.

Chapter 6 Special Report on the Development of Cross-border Ecommerce

In 2015, along with the rising enthusiasm in overseas shopping of domestic consumers enthusiasm and the increasingly liberal policy environment, cross-border e-commerce industry saw rapid development, with climbing proportion in the GMV of e-commerce in the country, and China has become one of the world's most active cross-border e-commerce markets. Cross-border e-commerce has become the new engine to promote China's foreign trade and a new important factor affecting the economic growth. This special report primarily reflects the current status of cross-border e-commerce development and new policies in 2015 as well as future development trends.

6.1 Development conditions of cross-border e-commerce

The development of cross-border e-commerce has enabled small and medium enterprises and individuals in China to better participate in international trade, and have access to high-quality goods and services from around the world. Through cross-border e-commerce, purchase and selling globally will be achieved, and benefit-all trade will become the new trend of future development.

6.1.1 Overall transaction scale of cross-border e-commerce

According to calculations[®], the GMV of cross-border e-commerce in 2015 was about RMB 4.56 trillion with a year-on-year growth of 21.7% (see Figure 1-5), among which, the value of exports was about RMB 3.99 trillion with a year-on-year growth of 21.9%; that of imports was about RMB 573.1 billion with a year-on-year growth of 20.3%.

In 2015, the transaction scale of cross-border e-commerce in China maintained a good growth rate. As the 13th Five-Year Plan proposed establishment of systems facilitating cross-border e-commerce and other new modes of trade", together with the further implementation of the Belt and Road Initiative and "Internet plus" strategy, as well as support from local government to cross-border e-commerce, the overall transaction scale of cross-border e-commerce may make new breakthroughs in the coming years.

6.1.2 Development conditions of cross-border e-commerce platforms

The development of cross-border e-commerce depends on the development of platforms. Many ecommerce platforms started to engage in cross-border areas, and more and more traditional companies set out to make their products and services "go overseas" through cross-border e-commerce. The development of cross-border e-commerce platforms registered diversity and ecological features.

1. Diversification of cross-border e-commerce

According to the types of service, cross-border e-commerce platforms can be divided into: information service platforms, online trading platforms and integrated foreign trade service platforms.

[®] There are two calculation methods: i. the manufacturer ratio measurement method; measured based on the market shares by collecting the data of such major companies as eBay, amazon, AliExpress and LightInTheBox; ii. parcel measurement method; calculated in proportion according to the data on delivery of oversea location, the quantity of EMS delivery and the data on delivery of other express companies or other channels. According to the data measured with the above two methods, the relevant data on the cross-border e-commerce will be obtained after the consideration of the proportion of the value of cross-border e-commerce in total imports and exports of China.

Cross-border e-commerce information service platforms have built a communication channel for enterprises and overseas markets, and solved the problem of information flow on the trading market, enabling domestic enterprises to effectively capture business opportunities in the international market and to sell their products overseas.

The rise of online trading platforms help enterprises make deals and complete payment via internet and carry out delivery via platform. Currently, the platforms engaged in on-line trading are basically for consumer goods. With reduction of intermediate stages and improvement of transaction efficiency, cross-border online transactions will help enterprises establish their brand images. Meanwhile, such platforms can accumulate certain data, and through analysis and integration of the transaction data, enterprises may provide better services to consumers from global.

Integrated foreign trade service platforms pay more attention to providing enterprises with supporting services after the transaction, by integrating services regarding foreign trade process covering customs clearance, tax, logistics, collection, payment, insurance, and financing. Integrated foreign trade service platforms may help small and medium enterprises better achieve connection with government regulators, logistics companies, banks, insurance and other trade-related institutions to improve trade facilitation.

Currently, among the new business entities registered on cross-border e-commerce platforms each year, over 90% are small and medium enterprises as well as individual businesses. In 2015, 11 international halls for the United States, Britain, France and other countries settled in Tmall.HK, and 2,605 overseas brands from 41 countries had participated in the activities for the "Double 11" Shopping Festival". JD.hk had placed halls for products from Japan, Australia, the United States and South Korean online successively in 2015, and used the modes of foreign direct purchase and brand attraction.Kaola.com had increased sales scale, attracting about 1,000 overseas band in 25 countries and regions to operate on its platforms, with the bonded warehouse area of over 150,000 square meters.

In addition to the above cross-border e-commerce platforms, there is a special mode under which it can be achieved that one account registered can be used for several platforms by conducting integration and collaborative management of global cross-border e-commerce platforms. For example, xbniao.com adopted a typical "collaborative platform" for cross-border trade. After a seller registers itself on the platform, it can have its product information show on eBay, Amazon, Newegg and other overseas well-known e-commerce platforms in 45 countries and regions such as the US, the UK, Brazil. The other method is to integrate platforms through language. For example, WMT365 was built as a Chinese language service platform for global cross-border e-commerce market, integrating quality B2B platforms globally and providing language services and marketing for cross-border trade to help small and medium enterprises overcome language and channel barriers.

2. Gradual formation of eco-system for cross-border e-commerce

The growth of B2B experienced the stages of the emerging of internet for information matching to the birth of trading service platforms from data precipitation, with the speed of response to transaction improved. The eco-system for cross-border e-commerce has been gradually formed, evolving from unilateral mode of upstream and downstream transactions to the ecological model of multi-party coexistence and mutual assistance. Cross-border e-commerce covering logistics, information flow, capital flow and document flow; along with the continuous development of cross-border e-commerce economy, software companies, agent operators, online payment businesses, logistics companies and other supporting companies are beginning to cluster around cross-border e-commerce enterprises, with services covering online shop fitting, picture description and translation, website operations, marketing, logistics, returns and replacements, financial services, quality inspection, and insurance. The ecosystem for the whole industry will become more complete with clearer division of work, gradually showing ecological features. Alibaba has formed a relatively complete industrial chain of service basically, with operational data and generation of value-added services. Alibaba integrated the data from integrated service platforms and pre-transaction data, extending cross-border platform services into offline services. For example, Alibaba's "onepartner" and "onetouch" system included more service providers into the cooperation regime, being upgraded from a platform to a ecosphere for foreign trade; "one partner" system would change former rivals to partners, to cooperate in serving small and medium enterprises with demands on foreign trade services.

6.1.3Overseas warehouses and bonded zones jointly boost the development of cross-border ecommerce

Cross-border e-commerce operators have continuously expanded their overseas market. On the other hand, the State vigorously supports the construction of bonded zones and overseas houses, which form special customs supervision areas. For cross-border e-commerce operators, this provides a more formal and convenient channel.

1 Government issued policies to support the building of "overseas warehouse", and there were both opportunities and challenges

To solve the issues of high logistics costs and long delivery time for small packages, some cross-border e-commerce enterprises began to accelerate the construction of overseas warehouses. At present, there have been many large-scale cross-border e-commerce enterprises engaged in export establishing overseas warehouses, and each overseas warehouse's area is between 30,000 and 50,000 square meters, while cross-border e-commerce enterprises engaged in import usually built 2,000-3,000-square-meter overseas warehouses. Premier Li Kegiang stressed at the work conference of the State Council that in order to promote the healthy and rapid development of cross-border ecommerce, we should achieve quality imports and exports by using "Internet plus trade", encourage retail and export enterprises engaged in cross-border e-commerce to expand marketing channels and cultivate their own brands and self-built platforms through opening overseas warehouses, experience stores or by other means. In 2015, the Action Plan for the "Internet plus Circulation" ⁽¹⁾ issued by the Ministry of Commerce proposed using market mechanisms to promote the construction of 100 overseas e-commerce warehouses. At the same time, it also proposed encouraging e-commerce enterprises to "go global" to establish overseas marketing channels, create their own brands, and build overseas warehousing facilities through multiple channels and in multiple modes, to enhance the global operation capability of e-commerce enterprises. The Guiding Opinions on Promoting the Healthy and Rapid Development of Cross-border E-commerce ⁽²⁾ issued by the State Council in June 2015 set out that retail and export enterprises engaged in cross-border e-commerce should be encouraged to strengthen cooperation with foreign enterprises, and get integrated into overseas retailing systems through standard overseas warehouses, experience stores and online shops for distribution, to achieve standard operation, professional management, intensive logistics and production, as well as reasonable regulation step by step.

Through building overseas warehouses, export enterprises may seize overseas markets and enhance the competitiveness of Chinese enterprises, to improve the flow; for cross-border e-commerce related to import, overseas warehouses may help promote the supply chain efficiency of enterprises, lower the thresholds for purchase of goods, and provide more products for Chinese consumers. However, in view of the risk that large-scale overseas warehouses built by cross-border e-commerce enterprises may be left vacant, such enterprises shall build overseas warehouses according to their own scale, characteristics, needs and other factors.

2. Imports and exports in bonded zones grew steadily

Bonded zones are areas where the customs implement special supervision. They have three functions, namely, bonded warehousing, processing for export and re-export trade, are granted with "certificate-free, tax-free and bonded" policies, and practice the operational mode for special preferential treatment. Bonded zones can be divided into designated bonded zones, bonded stores, bonded warehouses, bonded factories, and bonded exhibition halls in terms of specific functions. Bonded zones, as special supervision areas, have provided much convenience for importation made by cross-border e-commerce enterprises. They can store the goods at the bonded warehouse, and then direct dispatch goods from the bonded zones after consumers place orders. As a result, the efficiency of delivery has been greatly improved; and it is safer and more reliable as the goods are under the supervision of the customs. Figure 6-1 shows the monthly data for import and export in bonded zones in China in 2015. It can be seen from the data that the volume of import and export in bonded zones registers steady growth.

⁽⁰⁾ Ministry of Commerce. Action Plan for the "Internet plus Circulation" [EB / OL] [May 13, 2015] [April 2, 2016].

http://dzsws.mofcom.gov.cn/article/zcfb/201505/20150500972952.shtml.

[®] General Office of the State Council. Guiding Opinions on Promoting the Healthy and Rapid Development of Cross-border E-commerce (Guo Ban Fa [2015] No.46) [EB/OL] (June 20, 2015) [April 2, 2016]. http://www.gov.cn/gongbao/content/2015/content_2893139.htm.



Figure 6-1 Import and export in bonded zones in China in 2015

Data source: National Development and Reform Commission

6.1.4 Development Status of Free Trade Zones and Pilot Cities

1. Development Status of Free Trade Zones

A free trade zone refers to a small specific area which is set within the territory of a country and enjoys preferential policies. We call this act "outside the customs and within the boundary". The preferential policies they enjoy include but are not limited to tax preference, special supervision, less commercial regulation, and incentive plans. A free trade zone is typically centering on a port and provides functions of logistics, bonded area, processing, and demonstration according to their local comparative advantages and functional orientation. As pilot sites, free trade zones are of great significance for China's participation in international competition and keeping space with international standards. In 2015, four free trade pilot zones are founded, including the extended area of Shanghai Free Trade Pilot Zone, and Guangdong, Tianjin, and Fujian Free Trade Pilot Zones. Through active exploration and innovation, these zones have formed a number of practices of strong institutional innovation and good market entity feedback in terms of trade facilitation, investment system reform, and supervision during and after the trading process.

(1) Shanghai Free Trade Zone (FTZ): Shanghai is an international financial center. Since its foundation, Shanghai FTZ has made excellent achievements in financial innovation. By August 2015, an accumulated number of 29,000 free trade accounts have been opened, more than 70 enterprises are authorized to operate and manage the foreign exchange funds of their multinational corporation headquarters in a centralized way, and the cross-border RMB and foreign currency footings over free trade accounts exceed 2 trillion. Shanghai Customs has conducted active exploration on supervision service system innovation in facilitating customs declaration, ensuring safety and high efficiency, and realizing function extension, and tested the methods of "entry first, declaration later" by shipping bills, and "collective declaration first, self-transportation later". It also makes efforts in providing effective measures in automatic inspection, as well as simplification of entry registration list elements. In addition, it puts up with a series of systems to improve supervision efficiency and provide convenience for enterprises, including the pilot zone programs of cargo status classification supervision system, and port customs supervision "single window" management system.

(2) Guangdong Free Trade Zone: Faced to Hong Kong and Macao, this zone focuses on service trade liberation. It composes of three districts covering an area of 116.2 square kilometers, including Nansha, Qianhai, and Hengqin. There are more than 25,000 enterprises entering Qianhai with registered capital of RMB 1.5 trillion, including 15,000 financial or pseudo-financial enterprises, 1000 Hong Kong enterprises, and 61 world top 500 enterprises. In 2015, the number of newly established foreign-funded enterprises increases by 15.7%, and the actual use of foreign capital increases by 42.7%, exceeding USD 21.7 billion, among which Hong Kong and Macao investment capital increase by 48.3% and 222.2% respectively.

(3) Tianjin Free Trade Zone (FTZ): This zone is faced to Northeast Asia and aimed to promote the upgrade of manufacturing industry in Beijing, Tianjin, and Hebei. As the first free trade zone in northern China, Tianjin FTZ covers an area of 119.9 square kilometers. It grows with the development of Beijing, Tianjin, and Hebei. Together with projects of "One Belt and One Road" and opening of Binhai New Area, this free trade zone supports the development of Tianjin City. By using system innovation to serve substantial economy, it drives the economic development of Bohai Sea, and tries to form the characteristics of shipping taxing and financing. Since its foundation to the end of 2015, Tianjin FTZ has increased 14,105 newly registered market entities with a year-on-year growth rate of 118.55%. The registered capital reaches to RMB 389.057 billion with a year-on-year growth rate of 221.8%. Among the entities of free trade zones, an accumulated 11,539 RMB settlement accounts and 1,715 foreign exchange accounts are opened respectively; the cross-border balance of payments reach to USD 28.03 billion, foreign exchange settlement and sales reach to USD 12.08 billion, and cross-border RMB settlement reaches to RMB 72.13 billion.

(4) Fujian Free Trade Zone (FTZ): This zone is faced to Taiwan and focuses on cross-strait economic and trade cooperation. Covering an area of 118.04 square kilometers, it composes of three districts, including Pingtan, Xiamen, and Fuzhou, and strives to promote the investment and trade liberation with Taiwan. The foundation of this zone promotes the development of Taiwan financial enterprises in Fujian, as well as Fuzhou and surrounding areas. In addition, Fujian FTZ functions as a bridge of establishing two-strait trade.

2. Development Status of Pilot Cities

In March 2015, the State Council approved the foundation of China (Hangzhou) Cross-Border E-Commerce Comprehensive Pilot Zone. In October 2015, Tianjin became the eighth cross-border Ecommerce comprehensive pilot city. Table 6-1 lists the development status of eight cross-border Ecommerce pilot cities in China.

Hangzh ou	In 2015, Hangzhou achieved USD 2.273 billion export and USD 1.191 billion import in cross-border E- commerce, which greatly pulls the foreign trade export of Hangzhou by 5.4%. In the end of 2015, its transaction scale rapidly increased to USD 3.464 billion from USD 20 million in 2014.	
Shenzh en	In 2015, Shenzhen realized a transaction amount of over USD 30 billion in cross-border E-commerce with a year-on-year growth rate of 76.1%. Among which, the transaction amount increases to USD 0.1895 billion among the 1210 items of Qianhai Bay Bonded Port Area Customs (supervision mode codes), which was 6 times the amount of the last year.	
Zhengz hou	In 2015, the business quantity of Zhengzhou Cross-Border E-Commerce Pilot Zone undertaken by Henan Bounded Logistics Center reached to 50.016 million. The total goods value, import linkage tax, and related tax during the transaction reach to RMB 3.926 billion, 0.112 billion, and 0.405 billion respectively.	
Shangh ai	In 2015, the cross-border E-commerce realized over Shanghai cross-border E-commerce public service platform totaled RMB 0.439 billion with the direct mail import of RMB 0.122 billion and bounded import of RMB 0.317 billion, which was seven times the amount of the last year.	
Chongqi ng	In 2015, Chongqing cross-border E-commerce grew rapidly with the annual transaction amount to RMB 0.8 billion, which was 12 times the amount of the last year. In the same year, the import cross-border E-commerce quantity inspected by Chongqing Customs was up to 3.327 million with the goods value of RMB 0.786 billion, which was 14.9 and 12.1 times the quantity and amount of the last year.	
Ningbo	In 2015, Ningbo Cross-Border E-commerce Pilot Zone achieved a total import-export volume of RMB 8.13 billion, including RMB 2.93 billion import volume and RMB 5.208 billion export volume. Among over 20,00 foreign enterprises, more than 90% had conducted commercial activities over internet, which ranks amor the top in China.	
Guangz hou	In 2015, the number of Guangzhou cross-border E-commerce enterprises reached to 879, with an import and export volume of 6.85 billion, which was 3.7 times the amount of the last year. Guangzhou still ranked the first place by its large scale.	
Tianjin	In 2015, Tianjin Port direct mail increased rapidly. According to statistical data, the quantity of C type express transported over Tianjin Port increased to 8 million in 2015 from 4 million in 2014.	

Table 6-1 2015 development status of eight cross-border E-commerce pilot cities in China

Data source: Previous Statistical Reports on Internet Development in China

3. Development status of exhibition and trading centers for bonded goods

Exhibition and trading centers for bonded goods have been established in the free trade zones and pilot cities in China. The business of exhibition and trading of bonded goods has three characteristics: first, entitlement to customs bonded policies, which helps improve the liquidity status of import traders. Second, quality guarantee; if the imports shall be inspected by the inspection and quarantine administrations as required by law, the customs conduct whole-process interconnectivity and supervision through physical and electronical fences to guarantee that the goods imported are authentic. Third, price advantages. Import traders directly purchase goods from overseas, which reduces intermediate links of circulation of goods, thus lowering logistics costs and costs at the circulation phases.

^o Ningbo Exhibition and Trading Center of Import Goods. Exhibition and trading of bonded goods have good prospect [EB/OL](September 30, 2015) [March 2, 2016].

http://www.nbimp.com/info.aspx?ld=1565.

^{• 120 •}

During the May Day holidays in 2015, Tempus Exhibition Shop were often packed with customers, with online customer visits exceeding 20,000 per day⁰. In the Chongqing Lianglu-Cuntan Free Trade Port Area, the import goods exhibited and traded in the exhibition halls are more than 20,000 types, coming from over 40 countries and regions. From January to September, 2015, the trade volume in this area reached RMB 400 million⁰.

6.1.5Current status of cross-border online shoppers

The number of cross-border online shoppers in China continues to increase for two reasons: the gradual completeness and standardization of cross-border online shopping platforms and the strong willingness of Chinese consumers to participate in cross-border online shopping and the huge potential in those consumers.

1. Main features of cross-border online shoppers in the new era

According to the report of Amazon.cn, cross-border online shoppers in China currently are becoming younger, better-educated and with high income: nearly eighty percent of the consumer groups consist of people under the age of 35, fully reflecting the youngness of online shopping population. In addition, over ninety percent of consumers have a bachelor's degree or above, and over fifty percent have a monthly salary of more than RMB 5,000, highlighting significant proportion of consumers with high educational and income level[®].

In addition, the transaction scale of cross-border online shopping in China was also expanding. By 2015, the total spending of Chinese consumers on global shopping sites had increased more than six folds compared with the previous year. From January to October 2015, the spending of Chinese consumers on the overseas website of Amazon equaled to the total consumption in the past 20 years.

2. Cross-border online shoppers have diverse choices

As cross-border e-commerce platforms continue to expand business in overseas countries and regions, consumers have more and more choices, they can buy goods from markets of Japan, South Korea, UK, US, and Australia to Germany, France, Canada, Italy and Spain and other countries. The shopping items are also expanded from footwear, personal care products, baby and maternal products and electronic products to outdoor goods, toys and other products. In terms of consumer cities, although Beijing, Shanghai and coastal cities are still the places with the majority of consumers, consumers in Xinjiang, Qinghai, Tibet and other regions have begun to participate in cross-border online shopping.

6.2 New policies on cross-border e-commerce

6.2.1 Central government departments actively issued relevant policies

The rapid development of cross-border e-commerce has been recognized and supported by all levels of the country. In 2015, new policies have been issued to provide new policy support and sunshine for the development of cross-border e-commerce, by changing work processes and ways of customs and commodity inspection departments, and establishing information supervision platforms and service platforms adapted to the new mode of trade.

1. State Council released guidelines on promoting the development of cross-border ecommerce

In May 2015, the State Council promulgated the Opinions of the State Council on Striving to Develop Ecommerce to Speed up the Cultivation of New Economic Driving Force[®],

^o Guangzhou Daily. NPC representatives: expanding bonded zones and building fast consumption centers [EB / OL] (June 2, 2015) [March 20, 2016]. http://gzdaily.dayoo.com/html/2015-06/02/content_2937855.htm.

[©] Chongqing Lianglu-Cuntan Free Trade Port Area. Chongqing exhibition and trading center of bonded goods fully opened [EB / OL] (October 21, 2015) [March 20, 2016]

http://www.ccfta.com/ctbsgq_Content/ 2015-10/21/ content_3977729.htm.

[®] TechWeb. Amazon.cn released 2015 report on trends in cross-border e-commerce [EB / OL]

⁽December 10, 2015) [March 20, 2016] http://www.techweb.com.cn/news/2015-12-10/2239570.shtml. ^(a) State Council. Opinions of the State Council on Striving to Develop E-commerce to Speed up the

Cultivation of New Economic Driving Force [EB/OL] (May 7, 2015) [April 2, 2016].

providing guidelines in respect of customs clearance efficiency and risk monitoring, and also introduced the Several Opinions on Accelerating the Cultivation of New Competitiveness in Foreign Trade[®], in which e-commerce enterprises are encouraged to establish standardized overseas warehouses and integrate into the overseas retail system.

In June 2015, the State Council issued Guiding Opinions on Promoting the Healthy and Rapid Development of Cross-border E-commerce[®], which was a guiding document on facilitating the rapid development of cross-border e-commerce under the new situation and provided 12 opinions, including encouraging Chinese enterprises to make better use of e-commerce in foreign trade, encouraging competitive enterprises to become bigger and stronger, optimizing the supporting customs supervision measures, improve the inspection and quarantine regulatory measures and policies, clarifying import and export tax policies, improving the management of e-commerce payment and settlement, providing positive fiscal and financial assistance, building a comprehensive service system, regulating cross-border e-commerce operations, giving full play to the role of industry associations, strengthening bilateral and multilateral international cooperation, and strengthening the organization and implementation. According to these Opinions, governments at all levels are required to implement their development plans on the basis of the actual conditions in their regions, and each region received correct guidance and strong support in development of cross-border e-commerce.

2. FTAs further promote the development of cross-border e-commerce

On June 1, 2015, China and South Korea signed the Free Trade Agreement between the Government of the People's Republic of China and the Government of the Republic of Korea [®]. China-ROK FTA has defined the first free trade zone in Northeast Asia, and contributed to the full fusion of regional economic integration and industrial chain. The execution of this FTA meant that breakthroughs had been made in promoting the free trade between China and South Korea. This will inject strong vitality into the maritime transport, trade and other fields between China and South Korea. Currently, the bilateral trade scale between China and South Korea has reached USD 300 billion. The establishment of China-ROK Free Trade Area will further expand the scale of bilateral trade, and consumers can purchase products from China or South Korea directly through normal channels without intermediate links. This will bring new opportunities for development to enterprises engaged in cross-border e-commerce in the two countries.

On June 17, 2015, China and Australia signed the Free Trade Agreement between the Government of the People's Republic of China and the Government of Australia[®]. Against the backdrop of full implementation of FTA, ongoing expansion of trade and economic operation and active promotion of economic restructuring between China and Australia, the prospect is promising in cooperation between Chinese and Australian enterprises in the fields of trade in services and e-commerce.

Since the execution of China-ROK FTA and China-Australia FTA has accelerated the integration between Chinese and foreign economy and the development of regional economy, cross-border e-commerce enterprises may take the opportunity to explore more markets, enrich their products and reduce costs.

3. Customs released policies to support the development of cross-border e-commerce

In order to adjust the regulation of cross-border e-commerce trade, the General Administration of

http://www.gov.cn/zhengce/content/2015-05/07/content_9707.htm.

http://www.gov.cn/gongbao/content/2015/content_2893139.htm.

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^o State Council. Several Opinions on Accelerating the Cultivation of New Competitiveness in Foreign Trade [EB / OL] (May 12, 2015) [April 2, 2016]. http://www.gov.cn/zhengce/content/2015-05/12/content 9735.htm.

[®] General Office of the State Council. Guiding Opinions on Promoting the Healthy and Rapid Development of Cross-border E-commerce [EB/OL] (June 20, 2015) [April 2, 2016].

[®] Government of People's Republic of China. Free Trade Agreement between the Government of the People's Republic of China and the Government of the Republic of Korea [EB / OL] (June 1, 2015) [April 2, 2016]. http://fta.mofcom.gov.cn/korea/korea_agreementText.shtml.

⁽⁹⁾ Government of People's Republic of China. Free Trade Agreement between the Government of the People's Republic of China and the Government of Australia [EB / OL] (June 17, 2015) [April 2, 2016]. http://fta.mofcom.gov.cn/Australia/australia_agreementText.shtml.

Customs issued the Circular of the General Administration of Customs on Matters Relating to Adjustments to the Requirements on Operating Hours and Customs Clearance Time for Customs Regulation of Cross-border E-commerce[®], stating that as from May 15, 2015, customs regulation of cross-border e-commerce shall be conducted on 365 days a year without rest days, and customs procedures shall be completed with 24 hours upon arrival of the goods at customs supervision premises; 20 customs offices having carried out regulation of cross-border e-commerce developed a joint working mechanism, emergency plans and the general work scheme for customs clearance concerning cross-border e-commerce on 365 days without rest days, to timely grasp the e-commerce enterprises' demands and their operating rules, and through on-site bulletin boards, notice boards and other forms of publicity, intensify publicity of convenient customs measures, and fully implement the relevant requirements to ensure that e-commerce enterprises can fully enjoy the convenience in respect of customs clearance.

^o General Administration of Customs. Circular of the General Administration of Customs on Matters Relating to Adjustments to the Requirements on Operating Hours and Customs Clearance Time for Customs Regulation of Cross-border E-commerce [EB / OL] (May 8, 2015) [April 2, 2016]. http://www.caop.org.cn/detail.jsp?article_millseconds=1431564518950.

The Department of Processing Trade and Customs Bonded Operation of the General Administration of Customs issued the Letter of the Department of Processing Trade and Customs Bonded Operation on Strengthening the Regulation of Bonded Import under Cross-border E-commerce Shopping[®], with focuses on prohibiting cross-border inventors in cities other than those pilot cities, strictly cracking down on smuggling bit by bit, and handling illegal activities. The said letter also defined that cross-border bonded imports could be conducted only in the special customs supervision areas or bonded logistics centers in pilot cities for cross-border e-commerce services and shall not be carried out in ordinary bonded warehouses. Bonded warehouses must arrange the regulatory facilities in accordance with regulatory requirements, and the regulation over the payment data, logistics and order data are emphasized again.

4. General Administration of Quality Supervision, Inspection and Quarantine released policies to support the development of cross-border e-commerce

In March 2015, the General Administration of Quality Supervision, Inspection and Quarantine issued the Opinions on Deepening the Reform of Supervision Mode for Inspection and Quarantine to Support the Development of Free Trade Pilot Zones[®], to further support the development of cross-border e-commerce:

(1) Building working systems and mechanisms for inspection and quarantine suitable to the development of cross-border e-commerce. It is necessary to adapt to the new trends and requirements concerning the healthy and rapid development of cross-border e-commerce, carry out reforms and innovations and take actions in the principles of combining acceleration of the development and improvement of management as well as effective regulation and convenience in import and export, focus on resolving the issues arising from unsuitability and incoordination between the current regulatory regime for inspection and quarantine and the development of cross-border e-commerce, and speed up the establishment of institutional mechanisms that meet the requirements on inspection and quarantine for the development of cross-border e-commerce.

(2) Establishing the list management system for cross-border e-commerce. Except for the products and articles prohibited from entering China, full support shall be given to the development of cross-border e-commerce.

(3) Building risk monitoring and quality traceability systems for cross-border e-commerce. Strengthen risk assessment for cross-border e-commerce, and make full use of information technology means, so as to achieve "traceability in source and destination" for goods cross-border e-commerce.

(4) Innovating supervision mode for inspection and quarantine regarding cross-border e-commerce. First, full declaration management shall be conducted on the goods under cross-border e-commerce; second, centralized filing and handling of release formalities shall be carried out for the goods under cross-border e-commerce leaving China; and third, centralized filing and release upon verification shall be carried out for the goods under cross-border e-commerce entering China.

(5) Implementing filing management for cross-border e-commerce. Inspection and quarantine authorities shall implement filing management over cross-border e-commerce business entities and commodities, put in place the responsibility of cross-border e-commerce business entities for quality and safety, and promote and regulate the operating order regarding cross-border e-commerce, in order to achieve traceability concerning responsibilities for quality and safety.

(6) Strengthening informatization of cross-border e-commerce.

5. State Administration of Foreign Exchange (SAFE) supports the development of import under cross-border commerce

[©] General Administration of Customs. Letter on Strengthening the Regulation of Bonded Import under Cross-border E-commerce Shopping [EB / OL] (September 9, 2015) [April 2, 2016]. http://www.ebrun.com/20150909/148189.shtml

[®] General Administration of Quality Supervision, Inspection and Quarantine. Opinions on Deepening the Reform of Supervision Mode for Inspection and Quarantine to Support the Development of Free Trade Pilot Zones (March 23, 2015) [April 2, 2016].

http://www.aqsiq.gov.cn/xxgk_13386/jlgg_12538/qtwj/201512/t20151201_455245.htm.

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In January 2015, the SAFE issued the Guidelines on the Pilot Program for Cross-border Foreign Exchange Payment Business of Payment Institutions⁽¹⁾, expanding the pilot areas for foreign exchange payment to the whole country and allowing third-party payment institutions to apply for the pilot program. Currently, there are more than 30 third-party payment institutions that have been granted with cross-border payment licenses. Cross-border e-commerce operators engaged in import can use domestic bank cards or Alipay for acquiring, and purchase foreign exchange through a third-party payment institutions qualified for cross-border payment, or even by directly opening bank purchase of foreign exchange under the cross-border e-commerce payment business, successfully complete the foreign currency payments to foreign partners. According to the Guidelines, the maximum amount for a single transaction under online shopping increased from USD 100,000 to USD 50,000.

vUUt3QS9ZQnZ3LzZfSENEQ01LRzEwODRJQzBJSUpRRUpKSDEySTI! /? WCM GLOBAL CONTEXT=/ wps/wcm/connect/safe_web _store/safe_web/zcfg/jcxmwhgl/jcxmzh/node_zcfg jcxm_jcxmzh_store/0a685180471ba70aaa05ae3b4795588d.

[®] State Administration of Foreign Exchange. Guidelines on the Pilot Program for Cross-border Foreign Exchange Payment Business of Payment Institutions [EB / OL] (January 29, 2015) [April 12, 2016]. http://www.safe.gov.cn/wps/portal/! ut/p/c5/04 _SB8K8xLLM9MSSzPy8xBz9CP0 os3gPZxdnX293QwMLE09nA09Pr0BXLy8PQ19nU6B8pFm8s7ujh4m5jwFQ3t3AwNPEyd_PwznQ0MD Tml DucJB9yCq8wyyAKkyDnb1CvY2MvM0h8vjMB8kb4ACOBvp Hvm5qfoFuREGmQHpigA8Piyq/dl3/d3/L2dJQSE

6.2.2All the provinces and cities provided vigorous supports according to local conditions

With the development in pilot cities, all the local governments have established cross-border ecommerce service platforms (refer to Table 6-2) to serve the online purchase of bonded imports. Consumers could directly purchase imports via such platforms, and commodities on regular platforms have received the supervision and inspection of customs and commercial inspection departments. Meanwhile, pilot cities realized common development by cooperating with other relatively mature crossborder e-commerce enterprises.

City	Service platform	Туре	
Shanghai	KJT.com	An online shopping platform established by an enterprise with supports of government	
Guangzhou	leasy	A pilot online shopping platform established by local enterprise upon approval by government	
Zhengzhou	WGYP.com	A pilot online shopping platform established by local enterprise upon approval by government	
Shenzhen	Shenzhen Cross-border E-commerce Service Platform	A cross-border e-commerce investment attracting platform, rather than an online shopping platform	
Hangzhou	www.kjeport.com	An online shopping platform established by an enterprise with supports of government	
Ningbo	KJB2C.COM	An online shopping platform established by an enterprise with supports of government	
Chongqing	www.igetmall.net	An online shopping platform established by an enterprise with supports of government	

Table 6-2	Cross-border e-commerce service platforms of pilot cities
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Source: Previous Statistical Reports on Internet Development in China

1. Shanghai vigorously impelled cross-border e-commerce development

In July 2015, the General Office of Shanghai Municipal People's Government issued the Certain Opinions on Promoting the Cross-border E-commerce Development in Shanghai[®], which require to give full play to the innovation and reform advantages of China (Shanghai) Pilot Free Trade Zone and advantages of Shanghai ports to develop cross-border e-commerce, and put forward 12 major tasks: gathering cross-border e-commerce business subjects; improving public service platforms of cross-border e-commerce; developing logistics systems of cross-border e-commerce; establishing cross-border e-commerce; optimizing supporting customs supervisions measures; improving supervision policies and measures for inspection and quarantine; improving services of cross-border payment and the collection and settlement of foreign exchanges; innovating the taxation mechanism supporting cross-border e-commerce; intensifying financial and taxation supports; intensifying innovation researches and talent construction; and, optimizing the monitoring for market environment and statistics.

2. Hangzhou took new measures to promote cross-border e-commerce

In March 2015, the State Council gave a reply which approved the establishment of China (Hangzhou) Cross-border E-commerce Comprehensive Pilot Area (hereinafter referred to as "Hangzhou Comprehensive Pilot Area"), and clearly required that the Hangzhou Comprehensive Pilot Area should provide reproducible and propagable experience for the sound development of cross-border e-commerce in China by means of innovation of systems, management and services.

In June 2015, Hangzhou Municipal Government promulgated the Circular on Promoting Cross-border E-commerce Development (for Trial Implementation) ⁽²⁾, which mainly stipulates the following aspects:

⁽¹⁾ Shanghai Municipal People's Government. Certain Opinions on Promoting the Cross-border Ecommerce Development in Shanghai [EB/OL] (July 20, 2015) [April 5, 2016] http://finance.sina.com.cn/stock/v/20150728/175422813618 shtml

http"//finance.sina.com.cn/stock/y/20150728/175422813618.shtml.

[®] Hangzhou Municipal Government. Circular on Promoting Cross-border E-commerce Development (for Trial Implementation) [EB/OL] (June 26, 2015) [April 5, 2016]

http://www.hangzhou.gov.cn/art/2015/7/2/art_964937_282981.html.

encouraging the cultivation of cross-border e-commerce subjects, the construction of cross-border e-commerce platforms, the introduction and cultivation of cross-border e-commerce talents, the construction of cross-border e-commerce parks, the logistics construction of cross-border e-commerce, the construction of the financing system of cross-border e-commerce, and the export scale of cross-border e-commerce.

According to characteristics and development demands of Hangzhou Comprehensive Pilot Area, innovate customs supervision services, and establish a more efficient supervision mode and system. Support the "single window" construction of Hangzhou Comprehensive Pilot Area, and impel the opening and sharing of enterprise credit data. Propel the implementation of systems of "list declaration", "list statistics", and support the development of B2B export business of cross-border e-commerce. Meanwhile, further open and improve the "customs clearance management platform of cross-border e-commerce", realize the whole paperless course and management intelligence of customs supervision for cross-border e-commerce, and take the measure of "machines replacing people".

3. Ningbo intensified supports for cross-border e-commerce

In January 2015, the Administrative Committee of Ningbo Free Trade Zone issued the Certain Policies on Speeding up Gathering of Cross-border E-commerce Talents^①, which primarily support the cultivation of e-commerce talents, promote the gathering of e-commerce talents, support the entrepreneurship of e-commerce talents, and have reserved good talent resources for the cross-border e-commerce in Ningbo.

In October 2015, Ningbo Municipal People's Government officially issued the Guiding Opinions on Accelerating the Cross-border E-commerce Development in Ningbo[®], which specify that by 2018, Ningbo should realize the annual GMV of cross-border e-commerce of US\$ 10 billion, comprising the GMV of import of US\$ 2 billion and that of export of US\$ 8 billion, ranking among the top nationwide in terms of overall development level. Major work include: improving industrial distribution, and forming the new pattern of "multi-region, multi-mode and multi-category" development; improving supporting services, and perfecting the comprehensive service system of cross-border e-commerce; innovating supervision measures, and improving cross-border e-commerce management mechanisms; insisting on market operation, and perfecting cross-border e-commerce business systems.

4. Zhengzhou promulgated policies to promote cross-border e-commerce

In March 2015, the People's Government of Zhengzhou promulgated the Opinions on Accelerating Cross-border E-commerce Development[®], under which it is proposed that the GMV of cross-border e-commerce in Zhengzhou in 2015 should quadruple that in 2014, and the GMV should reach RMB 100 billion by 2017. Meanwhile, it is proposed to build a national-level cross-border e-commerce demonstration zone by taking Henan Bonded Logistics Center as a core area, continuously innovating mechanisms and systems, improving software and hardware facilities, specifying important time nodes, and accelerating the scaled development of cross-border e-commerce in Zhengzhou.

5. Shenzhen continuously guided cross-border e-commerce development

In June 2015, the Market and Quality Supervision Commission of Shenzhen Municipality issued the Certain Opinions on Promoting the Sound and Rapid Development of Cross-border E-commerce Market[®], and put forward guidance in 5 aspects: establishing a trusted transaction environment, an promoting the development of foreign trade; intensifying the cooperation with overseas third-party institutions, and promoting transaction facilitation; strengthening protection for intellectual property rights, and promoting brand innovations; perfecting dispute settlement mechanisms, and protecting legitimate rights and interests of operators and consumers; and, cracking down on illegalities and irregularities, and regulating market order.

http://public.zhengzhou.gov.cn/08ABA/65009.jhtml.

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^a Administrative Committee of Ningbo Free Trade Zone. Certain Policies on Speeding up Gathering of Cross-border E-commerce Talents [EB/OL] (January 14, 2015) [April 5, 2016].

http://qyzc.ningbo.gov.cn/attach/0/150225103434133.PDF.

[©] General Office of Ningbo Municipal People's Government Guiding Opinions on Accelerating the Cross-border E-commerce Development in Ningbo [EB/OL] (October 28, 2015) [April 5, 2016]. http://gtog.ningbo.gov.cn/art/2015/10/28/art 12963 6064.html.

People's Government of Zhengzhou. Opinions on Accelerating Cross-border E-commerce Development [EB/OL] (March 18, 2015) [April 5, 2016].

^(a) Market and Quality Supervision Commission of Shenzhen Municipality. Certain Opinions on Promoting the Sound and Rapid Development of Cross-border E-commerce Market [EB/OL] (June 19, 2015) [April 5, 2016].

http://www.sz.gov.cn/gsj/zcwj/dzswgl/jlglgf/201511/t20151125_3367672_15991.htm.

In addition, in July 2015, Shenzhen Customs formulated the Certain Measures of Shenzhen Customs on Supporting and Promoting the Construction and Development of China (Guangdong) Pilot Free Trade Zone, Qianhai & Shekou Area of Shenzhen[®], clearly proposing to support the development of cross-border e-commerce, establish a mechanism of connectivity between the customers supervision system and the cross-border e-commerce platform, and reinforce information sharing. It is also proposed to establish a mechanism of centralized customs declaration and taxation agency for operation subjects of the cross-border e-commerce platform, comprehensive service enterprises of foreign trade and logistics service enterprises, further improve the management mode for cross-border e-commerce, optimize customs clearance, and promote the sound and rapid development of cross-border e-commerce.

6. Chongqing primarily deployed cross-border e-commerce

By the end of December 2016, Chongqing Municipal People's Government issued the Implementing Opinions on Vigorously Developing E-commerce[®], which point out fostering and developing crossborder e-commerce enterprises. It is pointed out to support the construction of public service platforms of cross-border e-commerce and bonded intelligent warehousing, and impel leading enterprises to obtain a third-party cross-border payment license and independently establish a bonded warehouse; enhance the customs clearance efficiency of cross-border e-commerce; improve the construction of "single window" comprehensive service system of cross-border e-commerce customs clearance system, comprehensively push forward "one-stop operation" mode, and carry out the new customs clearance mode of "one examination and one clearance" by customs and inspection and quarantine departments for the cross-border e-commerce; improve the management and supervision mode for customs clearance and inspection and quarantine processes of goods of the cross-border e-commerce, promote the special account book management of the cross-border e-commerce for the bonded import mode of online shopping, establish a product quality traceability mechanism, and realize the entry, control, clearance and traceability of commodities of the cross-border e-commerce.

7. Cross-border e-commerce policies of other major province and cities

In the meantime, other major cities have successively issued relevant e-commerce policies, and promoted the development of the cross-border e-commerce.

In March 2015, the People's Government of Suzhou issued the Circular of Policies on Accelerating Ecommerce Development[®], which specify that rewards of RMB 0.5 million, RMB 1 million (including rewards of the preceding level) or RMB 2 million (including rewards of the preceding level) will be given to platform construction parties of the cross-border e-commerce platforms in Suzhou with annual sales amount exceeding US\$ 100 million, US\$ 300 million or US\$ 500 million for the first time

In July 2015, the General Office of People's Government of Shandong Province issued the Action Plan on Cross-border E-commerce Development in Shandong[®], under which the "635 Project" of crossborder e-commerce will be implemented, and it is aimed to foster 600 leading enterprises of crossborder e-commerce, construct 30 provincial cross-border e-commerce zones, 50 public overseas warehouses for the cross-border e-commerce, conduct training activities of "Conduction of Crossborder E-commerce in Thousands of Enterprises", promote 30,000 enterprises in Shandong to conduct the cross-border e-commerce, and record the annul GMV of the cross-border e-commerce in the whole province more than US\$ 20 billion by 2017.

In November 2015, the General Office of Sichuan Provincial People's Government issued the Implementing Opinions on Accelerating Cross-border E-commerce Development[®], which arrange the

[®] Shenzhen Customs. Certain Measures of Shenzhen Customs on Supporting and Promoting the Construction and Development of China (Guangdong) Pilot Free Trade Zone, Qianhai & Shekou Area of Shenzhen [EB/OL] (July 21, 2015)

[[]April 5, 2016]. http://www.szqh.gov.cn/pub/qhzmq/zwgk/cxyzc/201507/t20150721_18141509.html.

⁽²⁾ Chongqing Municipal People's Government. Implementing Opinions on Vigorously Developing E-commerce [EB/OL] (December 30, 2015) [April 5, 2016].

http://www.cq.gov.cn/publicinfo/web/views/Show! detail.action? sid=4057460.

[®] People's Government of Suzhou. Circular of Policies on Accelerating E-commerce Development [EB/OL] (March 16, 2015) [April 5, 2016]. http://www.jiangsu.gov.cn/zwfw/lstd/qy/zcfg/201504/t20150403_380273.html.

⁽⁶⁾ People's Government of Shandong Province. Action Plan on Cross-border E-commerce Development in Shandong [EB/OL] (July 30, 2015) [April 5, 2016].

http://www.shandong.gov.cn/art/2015/8/7/art_285_7262.html.

[®] Sichuan Provincial People's Government. Implementing Opinions on Accelerating Cross-border E-commerce

following work: (1) establishing a convenient and efficient service system; (2) establishing a supporting system with efficient connection; and (3) constructing a leading system of local cross-border e-commerce teams.

In December 2015, the General Office of People's Government of Guangxi Zhuang Autonomous Region issued the Implementing Opinions on Promoting the Sound and Rapid Development of Crossborder E-commerce in the Whole Region[®], which clearly propose to construct an economic and trade service platform of China-ASEAN Information Harbor, and build a China-ASEAN cross-border e-commerce base.

6.3 Development trend of cross-border e-commerce

The cross-border e-commerce not only provides new channels for the development of service trade and opens a new space, but also provides new fields and contents for the service trade. The vigorous development of the cross-border e-commerce is of increasingly important significance for expanding market shares of international trade in China, changing the development modes of foreign trade, and forming management systems and rules adapting to and guiding global cross-border e-commerce development.

6.3.1 Impel the leapfrog development of cross-border e-commerce by virtue of "One Belt One Road"

The "One Belt One Road" strategy will drive the purchase demands of countries along the "One Belt One Road", and bring new business opportunities for exports of China. At present, all the 65 countries along the "One Belt One Road" are considering how to make better use of Internet to realize the connectivity with the world. From infrastructures to commodity transactions and then to cultural exchanges, Chinese e-commerce importers will have richer resources, commodities and brands; from commodity trade to service trade and from consumables to mineral resources, such importers will have a broad development space. In terms of export, Chinese cross-border e-commerce exporters will combine Maritime Silk Road and Land Silk Road to export more commodities and service with excellent quality and low prices to countries along the two roads. For both introduction and going out, Chinese cross-border e-commerce exporters will face more new development opportunities.

Currently, China is radiating the world through national strategies such as "One Belt One Road", speeding up the export of domestic productivity, realize the efficient circulation of resources, and impel the integrated construction of global economy. Along with the robust development of information economy and information technology, e-commerce, especially B2B cross-border e-commerce, is continuously influencing the development of traditional industries by virtue of its advancement. Against the great background of "One Belt One Road", the B2B cross-border e-commerce has undoubtedly become an "edged tool" speeding up productivity export. The B2B cross-border e-commerce platforms will give full play to the characteristics of efficient connectivity of Internet, comply with the national strategy of "One Belt One Road", help traditional industries with industrial upgrade and the improvement of product quality, fully connect with international quality demands, expand market shares, and ultimately realize productivity export, thereby naturally resolving excess productivity[®].

6.3.2Integrated development of all the online and offline channels of cross-border e-commerce

The cross-border O2O with online and offline integration will be the trend of future cross-border ecommerce development. Cross-border e-commerce enterprises emphasize operations, including the operation of experience stores, online and offline integrated services and the consolidation of nearly logistic distribution. The online and offline integrated development will drive the development of crossborder export e-commerce, which will enable domestic consumers to enjoy the same products and service with no need to go abroad and drive the transformation and upgrade of domestic manufacture.

In 2015, Guangbai Group of Guangzhou launched an online cross-border e-commerce channel, and opened offline experience stores; mia.com expanded offline channels through RYB Education Institution, and jointly developed in cross-border mother-infant O2O field; and, ymatou.com expanded its industry reputation though offline channels such as Stellar International Cineplex.

⁽⁰⁾ People's Government of Guangxi Zhuang Autonomous Region Implementing Opinions on Promoting the Sound and Rapid Development of Cross-border E-commerce in the Whole Region [EB/OL] (December 2, 2015) [April 5, 2016]. http://www.gxzf.gov.cn/zwgk/zfwj/zzgrmzfbgtwj/2015gzbwj/201512/P020151221425747753223.pdf.

[®] China.org.cn. Gather Forces of Trade -- "One Belt One Road" Speeds up Productivity Export [EB/OL] (February 24, 2016) [April 5, 2016]. http://science.china.com.cn/2016-02/24/content 8592657.htm.

In 2016, cross-border e-commerce enterprises will continuously strengthen shopping experience through new and more convenient online technological means, develop offline O2O experience stores of cross-border e-commerce products, provide offline commodity presentation services, and promote users to place order. For example, the O2O business bodies of "stores in front and warehouses behind" type will realize functions of one-stop experience and pickup; entity enterprises of platform type will build warehouses in stores, which warehouses will be monitored and managed as bonded warehouses, thereby achieving multiple functions including presentation, experience, sales and purchase.

6.3.3Exports of cross-border e-commerce drives a new growth in foreign trade

In 2015, gross value of imports and exports in China reached RMB 24.58 trillion, with a year-on-year fall of 7%. In particular, the gross value of exports was RMB14.14 trillion, down by 1.8%; trade surplus reached RMB3.69 trillion, up by 56.7%. Under such a severe foreign trade situation, the trade volume of e-commerce importers recorded a reverse year-on-year rise of 38.5%, and the sales amount of all the e-commerce export platforms also grew by 10% year on year, proving that the cross-border e-commerce can effectively guide domestic enterprises to go to international market.

Owing to the change from traditional export of foreign trade to cross-border e-commerce, export enterprises, with a lot of intermediate links of traditional trade omitted, directly face consumers, so they can manufacture products closer to market according to feedback of customers; the electronic and paperless customs clearance in the whole process significantly enhances the efficiency of customs clearance, and reduces export costs; enterprises can cut down costs in intermediate links to the largest extent, and enhance international competitiveness.

In the situation of weak rejuvenation of imports and exports of foreign trade, vertical e-commerce exporters have great development potential. Traditional e-commerce exporters, mainly commodity-oriented, rely on price search and comparison to get business to a large extent, and simply sell cheap goods overseas, resulting in a low user loyalty. E-commerce enterprises targeted at vertical population stress the conversion rate of cultivation of social networks and communities, which is relatively easy to foster user loyalty and provides opportunities to realize user teachability and high per customer transaction.

In respect of target sales market, mature markets represented by the USA, Britain, Germany, Australia and Canada, will still be major target markets of the retail export industry of cross-border e-commerce in future, and will keep a rapid growth, because of their advantages such as high per capita purchasing power, popular cross-border online shopping concept, mature online consumption habits and perfect supporting logistics facilities.

Emerging markets are becoming new driving forces of retail export industry of cross-border ecommerce. Local e-commerce enterprises in countries such as Russia and Brazil are not developed, but such countries have great consumption demands, so products made in China have huge advantages on such markets; owing to a large population and consumption preferences close to those of China, Southeast Asian market also has considerable consumption potential.

6.3.4Integrate resources and optimize cross-border business processes

Traditional international trade features adverse factors such as low degrees of informatization and automation and a low level of electronic networking. Through restructuring of traditional business processes and integration of resources, cross-border e-commerce will enhance the response speed of exports.

Improve comprehensive public service platforms of cross-border e-commerce. Such platforms not only need to coordinate with customers to simplify customs clearance process, but also need to investigate overseas markets, screen readily marketable commodity categories, and determine the quantity demanded and quality requirements, so as to provide enterprises with market research and analysis services, and help foreign trade enterprises find and develop markets.

Coordinate with commodity inspection departments, and build standard inspection and quarantine supervision platforms. During exports, cross-border e-commerce enterprises may be confronted with increasingly strict inspection and quarantine barriers, which restrict the exports of products made in China. The assurance of exported products to reach inspection and quarantine standards for exports to target markets by building standard inspection and quarantine supervision platforms will enhance the efficiency of customs clearance, and decrease costs arising from non-compliance.

Build comprehensive logistics platforms for cross-border e-commerce. Now, a majority of cross-border e-commerce enterprises in China do not have their own logistics service platforms. The comprehensive logistics service platforms to be built will assist such enterprises to establish overseas warehouses in order to enhance distribution efficiency.

6.3.5Further optimize the development environment of cross-border e-commerce

The Ministry of Commerce, the Ministry of Finance, the General Administration of Customs and the State Administration of Taxation will optimize the development environment of cross-border e-commerce in the following aspects:

(1) Speed up the implementation of trade facilitation measures including the construction of "single window", perfect the comprehensive service system of foreign trade, provide more foreign trade conveniences for traditional industries, encourage traditional enterprises to expand overseas market by virtue of cross-border e-commerce, further decrease trade costs, and help more small- and medium-sized enterprises (SMEs) to participate in global trade.

(2) Adjust the unfair competition between retail-imported commodities of cross-border e-commerce and goods of general trade imports as sold in China and domestic goods, arising from luggage and postal articles import taxes, and support the adjustments and transformation of traditional business types to respond to challenges of new business types; adjust the differences in competitiveness between pilot cities and non-pilot cities due to different policies, so as to promote the expansion of retail import business of the cross-border e-commerce from a minority of pilot cities to the whole country; and, create a retail import market environment of the cross-border e-commerce with uniform tax rates and uniform standards, favorable for consumption and convenient in management⁽⁰⁾.

(3) Eliminate system constraints for the B2B development of the cross-border e-commerce, and establish an industrial self-discipline mechanism for cross-border e-commerce platforms. Cross-border e-commerce enterprises are confronted with many actual problems in the process of their own development. Governments will eliminate development obstacles through system innovations. Industrial associations of the cross-border e-commerce will establish a positive supervision system through industrial self-discipline, in a bid to impel the positive development of cross-border e-commerce platform enterprises.

(4) Encourage cross-border e-commerce enterprises to speed up integration with traditional enterprises, and establish a global supply chain by virtue of advanced Internet technologies. The comprehensive pilot areas of cross-border e-commerce in China have reached 13 ones, distributed in different areas in China. The mutual competition among the comprehensive pilot areas of cross-border e-commerce will give full play to their effects. Traditional foreign trade and manufacture enterprises will, by virtue of the launch for operation of the comprehensive pilot areas of cross-border e-commerce and cross-border e-commerce platforms, strengthen their capability of online transactions, and practice the new mode of "Internet + foreign trade + made in China". In the meantime, the government will, by integrating data, urge Chinese enterprises to enhance supply quality, intensify the cultivation of proprietary brands, and enhance the comprehensive competitiveness of Chinese enterprises on the international market.

Chapter 7 Special Report on the Development of Mobile Ecommerce

In recent years, the development of a new generation of information technologies such as mobile Internet has been accelerated. Along with the popularization of the mobile Internet and the gradually mature PC online shopping market, the mobile e-commerce enterprises has substituted PC online shopping and become the first driving force on the online shopping market. The special report focuses on the development of mobile e-commerce in China in 2015, especially the development overview, and expects the development trend of the mobile e-commerce in 2016.

7.1 Development conditions of mobile e-commerce

7.1.1 Basic conditions

According to the Statistical Report on Internet Development in China, as at 2015, China's mobile phone online shopping users have grown rapidly to 340 million of persons, with a growth rate of 43.9%; and, the use percentage of mobile phone online shopping rose from 42.4% to $54.8\%^{\circ}$, showing the robust development of mobile shopping industry.

In 2015, all the Internet firms and traditional household appliance enterprises intensified the entry into mobile phone market, making prices of smartphones continuously going down. In addition, the government reinforced supports for mobile Internet access, and urged operators to reduce Internet access charges and enhance network coverage so as to optimize the Internet access environment of netizens and further promote the rapid development of mobile shopping.

In 2015, China's mobile online shopping market recorded a transaction scale of RMB 2.1 trillion, with a year-on-year growth of 123.8%, which exceeds that of PC end. On the overall Internet market, the contribution rate of mobile end exceeded 55%, and will keep rising.

Along with the continuous market promotion, the transaction scale of offline code scanning payment will further rise. Besides, the increasing rise of viscosity of users and social payment actions such as distribution of red packets and account transfer also drove the growth in the transaction scale of payment by account transfer. The mobile payment habit of users has been formed gradually. In 2015, the transaction scale of third-party mobile payment in China amounted to RMB 10.2 trillion.

China's construction and upgrade of communication infrastructures, the active promotion by operators and the demands of netizens for high-traffic applications of the mobile end have jointly impelled the transfer of users from 2G to 3G/4G. As at December 2015, the percentage of netizens surfing the Internet through 3G/4G in China has reached 88.8%, up by 3.1% as compared with June 2015.

At present, mobile e-commerce application fields have been expanding, technological innovation, application innovation, financial innovation and mode innovation have been accelerated continuously, and the mobile e-commerce has entered into a stage of rapid development and has become the important strategic layout point of many B2C e-commerce and traditional enterprises.

7.1.2 Development conditions of mobile shopping market

During 2011-2015, China's mobile shopping market was at the stage of blooming development, and the annual transaction scale showed a situation of multiplication. In 2015, the GMV exceeded RMB 2 trillion, and the penetration rate of GMV of the mobile end reached 50%. All the e-commerce enterprises continuously focused on the mobile end, and took the acquisition of new users and extension of categories. JD.com and Tencent cooperated in introducing social contact traffic. There are numerous emerging venture enterprises, so the degree of industrial concentration is going downwards. Mobil shopping applications of such vertical and subdivided types as of mother and child, overseas purchase and fresh food emerge one after another. The mobile shopping in China shows a situation of "contending for hegemony". It is expected that the mobile shopping will keep a good and fast development trend in the coming years (refer to Figure 7-1).

⁽⁰⁾ China Internet Network Information Center. The 37th Statistical Report on Internet Development in China [EB/OL] (January 22, 2016) [April 23, 2016].

http://cnnic.cn/gywm/xwzx/rdxw/2015/201601/t20160122_53283.htm.



Source: a comprehensive analysis on the statistical data provided by iResearch and Analysys

The popularization of the mobile Internet, the inclination of netizens from PC end shopping to mobile end shopping, improvements of mobile shopping scenarios, the promotion of mobile payment applications, the intensification of all the e-commerce enterprises in respect of mobile end layout and the development of independent mobile end platforms are all important factors of the fast development of the mobile shopping market in China. It is expected that the mobile shopping market will maintain a fast growth in the coming years. Figure 7-2 reflects the steady rise of the scale of mobile shopping users in China during 2011-2015.



Figure 7-2 Growth in mobile shopping user scale in China

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews

In terms of share percentages of PC end and mobile end, the GMV of mobile shopping in China accounted for 55.5% of the overall online shopping market in China in 2015, up by nearly 22% as compared with 2014 and exceeding the percentage of online shopping of PC end for the first time. It is expected that the percentage of mobile end transactions will continuously rise in the coming years (refer to Figure 7-3).



Figure 7-3 Terminal penetration rate of mobile shopping industry in China

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews

7.1.3 Development conditions of mobile tourism market

Along with the rapid development of mobile Internet, mobile tourism APPs have been launched one by one. Online tourism enterprises, including Ctrip, tuniu.com and aoyou.com, have successively launched the mobile end APPs thereof. Meanwhile, pure mobile end enterprises, such as breadtrip and 117go.com, have been emerging gradually. The mobile end enterprises have been replaced and upgraded rapidly. Along with the popularization of intelligent devices, users have formed the habit of mobile reading, and have been spending a lot of fragmented time in mobile devices. Users have been transferring from PC end to mobile end, and APPs have been gradually becoming necessary rapid and convenient tools for inquiring guides and selecting tourist products in the devices of users travelling or intending to travel.

The mobile Internet has natural associativity with tourist products and services. Under the background of the rapid development of the mobile Internet, mobile tourist services ushered in an explosive growth in the past two to three years. The networking of tourist consumption, reservation and services will achieve leapfrog development. The proportion of mobile tourist visits rises gradually, for mobile end reservation applications have been accepted and recognized by users, in addition to the use of a lot of mid-tourism service applications of the mobile end. Products with a high degree of standardization such as tickets, hotels and admission tickets are hot in the mobile end. The arrangements for the mobile Internet are the priority of online tourism suppliers. Now, Ctrip and Qunar.com take the leading position in respect of user scale and transaction scale. Alitrip provides a tourism traffic reservation platform by virtue of Ali e-commerce platform resources and advantages of payment systems.

According to monitoring data of iResearch, advantages of the mobile end are highlighted, in terms of use times of online tourist service websites and APPs. Users of online tourism are transferring from PC end to mobile end step by step. The mobile Internet has a natural associativity with tourist services. The mobile Internet better meets user demands at any time and any place, so it is easier to be accepted and recognized by users. Along with the change of travel modes of people and the popularization of intelligent application, consumers, who no longer simply eat and lodge, integrate catering, entertainment, transportation, ticket affairs and so on into local life services, forming customized and diversified mobile consumptions. Therefore, the mobile end of tourism has a large development space. While a lot of money is spent on the online tourism market, relevant platforms need to keep a high growth in the mobile end and form competitive barriers so as to stand out.

7.1.4 Development conditions of mobile service market

In the mobile entertainment service market, along with the coming of 4G times, mobile entertainment services have been keeping pace with traditional PC, TV and network entertainment. Mobile entertainment business has become prosperous increasingly, and categories of enterprise services have been increasing. The mobile entertainment service market has the most development potential in respect of audio-visual materials, games, navigation, network videos and so on. In recent years, China's mobile entertainment market has showed an explosive growth, and the mobility of entertainment services has become increasingly obviously. In future, it is hopeful that the mobile entertainment may become a new round of hot spot of industrial development. Take network videos for example. The gross network video views of CCTV's Spring Festival Gala of 2015 exceeded RMB 500 million. Particularly, the percentage of video views of the mobile end was over 60%. In digital reading field, Migu Digital Media, focusing on the provision of handheld digital reading, now records 162 million of monthly visitors and has included 436 thousand of legitimate books into database. On that basis, Migu Cartoon and Migu Music, by relying on the industrial chain resources of Migu Digital Media, expand the new promising industry of digital entertainment, in a professional way. By seizing the development opportunities of mobile Internet and digital services, China Mobile achieves the innovative development in terms of reading, music, video, games and so on by virtue of its advantages.

In the mobile medical service market, mobile medical products in China, along with the development of mobile Internet technologies, are becoming mature, and industrial chain is improving step by step. Guiding Opinions of the State Council on Actively Promoting "Internet +" Action[®] issued in July 2015 require to develop the medical and health services based on Internet and support third-party institutions to construct sharing service platforms of medical information including medical images, health archives, test reports and electronic medical records. Baidu stresses data collection and big data calculation, and has established its Mobile Health Business Department; Alibaba Group has entered into the market in respect of medicine e-commerce, and has opened its platform for medical institutions through Alipay; Tencent has implemented "Jingyitong" project by cooperating with Bank of Beijing. Shanghai First Maternity and Infant Hospital has established a patient service system based on the mobile end, achieving the application of many functions including WeChat service number, Alipay wallet, mobile phone scanning and mobile phone shaking. The said hospital has taken a lead in starting the "mobile Internet enterprises to jointly research, develop and test the application of various mobile medical treatments and enhance the medical experience of patients and the management efficiency thereof.

In the mobile life service market, as the mobile Internet goes deeply into life, the mobile life service market shows a flourishing situation, and the transfer of users to the mobile end is more and more obvious. Figure 7-4 shows the scale, growth rate and penetration rate of third-party mobile payments in China during 2011-2018.



[®] State Council. Guiding Opinions of the State Council on Actively Promoting "Internet +" Action [R/OL] (July 4, 2015) [January 23, 2016]. http://www.gov.cn/zhengce/content/2015_07/04/content_10002.htm.

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Figure 7-4 Payment scale, growth rate and penetration rate of third-party mobile payments in China

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews

The mobile Internet is changing traditional lifestyles at an unprecedented pace, in respect of tourism, catering, retails, music, vehicle calling, etc. Life service products largely meet demands of users, and stretch into all aspects of life. Figure 7-5 reflects business types of third-party mobile payment in China from the fourth quarter in 2014 to the fourth quarter in 2015.



Figure 7-5 Business types of third-party mobile payment in China

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews

7.2 Characteristics of mobile e-commerce development

7.2.1Large e-commerce enterprises continuously consolidated the overall arrangements for the mobile end

Since the beginning of 2015, all the e-commerce platforms and many enterprises with traditional brands have been speeding up the overall arrangements for the mobile end, keeping enriching mobile end business, improving mobile end services, and promoting the continuous growth in shopping scale of netizens in the mobile end and the fast growth in the GMV of the mobile end. JD.com, Alibaba and other e-commerce giants consolidated the overall arrangements for the mobile end, reinforced the cultivation of mobile end use habits of users, consolidated user experience, consolidated the promotion of the mobile end, and successively launched activities exclusive for the mobile end, such as "6•18", "Double Eleven", "Black Friday" and "Double Twelve" Shopping Festivals, in order to encourage consumers to transfer to the mobile end.vip.com has transferred group-buying to the mobile end, and has launched APPs in segmented fields to intensify segment categories; JUMEI.COM has been focusing on overseas shopping business, and "Global Store" has become its important engine for the growth in the mobile end; suning.com, GOME.COM.CN, dangdang.com, yhd.com, Amazon and other traditional enterprises have begun to make every effort to invest in the mobile end, and have been seizing more market shares of the mobile end by launching mobile WeChat stores, starting mobile overseas shopping, implementing festival promotions of the mobile end and so on.

7.2.2 Mobile shopping market showed a situation of "contention of a hundred schools"

In 2015, the mobile shopping field in China showed a situation of "contention of a hundred schools and blossoming of a hundred flowers". All links of the industrial chain such as the e-commerce transaction platform, e-commerce shopping guiding platform and e-commerce service platform have been developing vigorously. Meilishuo.com has launched the independent overseas shopping APP of the mobile end -- Meilishuo HIGO, and has connected to the access of WeChat Wallet in order to seize more flow resources. After being transformed to social e-commerce of "B2C + C2C", Mogu Street, at the beginning of 2015, launched the APP of Version 7.0 thereof, and launched the mobile application focusing on fashion buyers -- Top, helping fashion insiders open stores, forming an individual brand community, bringing new customer sources and strengthening the viscosity of users. Additionally, since 2015, traditional enterprises have been having a try in WeChat business to a large extent. In addition to suning.com and GOME, Joincare, JZJT, HPGC, Renhe, Arche and other traditional enterprises in health and beauty industries have successively opened WeChat business channel, reflecting the increasingly fierce competition in the mobile shopping market.
7.2.3 Mobile e-commerce combined social exchanges, showing increasingly apparent fansoriented operation

The difference in screen size of the PC end and the mobile end leads to the difference in information display presentation. The advertising space of the PC end is relatively abundant. As long as an enterprise pays some money, it can buy the promotion position of the corresponding traffic to obtain large-area advertising display and media explosion and make effects of brand presentation and clicking to buy; different from the economic mode of traffic of the PC end, APP is mainly used in the mobile end. APP has limited display position and apparent traffic fragmentation and decentralization. User promotion connects with social exchanges more closely.

After JD.com obtained the Leve-1 shopping access of WeChat upon strategic cooperation with Tencent, 500 million of active users of WeChat have been helping the continuous expansion of the mobile end of JD.com. The conversion rate of social exchange e-commerce enterprises such as Mogu Street is largely higher than traditional e-commerce enterprises. Xiaohongshu has been developing e-commerce by relying on the community mode of cross-border shopping, and JUMEI.COM has invested in "babytree" for the purpose of increasing retail volume by virtue of maternal and infant customer groups.

7.3 Development trend of mobile e-commerce

7.3.1The percentage of flash shopping of mobile e-commerce will keep rising

The flash shopping has a high requirement for timeliness. The mobile end just has the characteristic of immediacy, enabling panic purchase at any time. Besides, the flash shopping stimulates potential shopping needs or "indefinite" shopping desires of users to a large extent. Scenarios of the mobile end are mainly the "entertainment and leisure state at home" and the "state of skilling time on the road". Such scenarios exactly magnify the "window-shopping interest". Additionally, commodities set for flash shopping have large discounts and apparent phased price preferences; categories of commodities consumed by mobile users feature low consumption amounts, less prudent consumption decisions than those for the PC end, so they can easily stimulate impulsive consumption by "time limit", "famous products", "special prices" and so on.

Take core enterprises for example. vip.com starting business by the mode of online special offer with time limits emphasizes "famous products + discounts", getting good market feedback; JUMEI.COM focusing on the special offer of famous products records the GMV of the mobile end in excess of that of the PC end; Taobao and Tmall have launched modules of daily special prices, second killing and so on to develop the flash shopping; JD.com has split out a separate team to operate the flash shopping business; dangdang.com has been launching "flash shopping of new products, second killing and collection of remaining products" on its homepage; and, the volume of flash shopping channels of enterprises including yhd.com, Mogu Street, Meilishuo.com and HIchao.com are much higher than that of the regular online retail mode thereof. In that light, along with the deep development of the mobile shopping industry in China, users' demands for discounts of famous products will become increasingly great, the flash shopping behaviors of the mobile end will be more frequent, arrangements by enterprises for the flash shopping will be improved step by step, and the percentage of the flash shopping mode on the mobile shopping market in China will keep increasing.

7.3.2Mobile e-commerce will promote online and offline development

As compared with the PC end, mobile shopping is less restricted by time and space, has the characteristic of apparent immediacy, and interacts with offline consumption more scenically: for example, obtaining real-time audio-visual images via cameras, positioning real-time geographic locations by GPS and completing the real-time sense of gravity through gyroscope. In terms of the mobile shopping industry, such features of the mobile end supplement the access to offline market of mobile shopping. Typically, the code scanning application in different offline living scenarios including department stores, subways and streets develop prosperously. Users can scale the bar codes or two-dimensional codes of offline commodities to skip to corresponding official webpages or online flagship stores, in order to place orders and make payments online on corresponding shopping webpages.

In terms of traditional department stores and supermarkets, the mobile end, as an important link of allchannel control, plays a role in online brand publicity and the rise of enterprise reputation and influence; covers users unable to be radiated by stores, expanding consumption radius; improves user experience, reduces commodity supply gap arising from limited inventories of stores, e.g. the temporary shortage in respect of size and color, and eliminates users' doubts that "a commodity is inconsistent with picture" and "size is improper". In future, traditional enterprises will intensify arrangements for the mobile end, which will mainly play a role in brand publicity and supplement offline transactions, and will not shake the whole mobile shopping market. In a long time, Alibaba, JD.com, vip.com, JUMEI.COM, dangdang.com, yhd.com and other core e-commerce enterprises will still be main forces for the development of the mobile shopping market in China, as supplemented by emerging long tail mobile APPs.

7.3.3 Mobile e-commerce will develop towards segmentation and verticalisation

User behaviors of the mobile end have the apparent characteristic of fragmentation: users in the mobile shopping industry spend a little time in browsing commodity webpages. The "great and full" presentation method of a large number of commodities in the PC times is challenged in the mobile end. Vertical e-commerce enterprises can provide more specialized and segmented products. The segmentation of mobile shopping application and the verticalisation of commodity categories are the important development trends of the mobile shopping in future. The second-hand transaction application based on LBS corresponds to the feature of mobile positioning. Take the first domestic second-hand transaction platform based on LBS -- 15youyou for example. By correctly positioning the geographical locations of users, it collects the transaction information of nearby idle second-hand goods, and satisfies users' demands for nearby purchase, sales, goods exchange, etc. However, most of sellers of such platform-type second-hand deals based on C2C sell goods at a loss, so appeals for marketing are not strong. Such profit making mode is immature, and development space is limited. In future, more segmented and vertical independent APPs will be favored by mobile shopping users. Smallisbeautiful e-commerce will usher in opportunities.

7.3.4 Mobile end operates with simplified forms and refined contents of webpages

The PC end generally has a screen size larger than 13 inches, and with the assistance of a mouse and keyboard, has a huge amount of information, interacts flexibly, and has complex functions. Pad and mobile phone end general has the screen size of 2.8~10.1 inches, leading to a limited amount of information. Interaction methods are mainly touch, easily resulting in low precision and wrong operations, and there is no pointer for confirmation. Such differences entail that functions of the mobile end should be adjusted accordingly, and there should be a presentation form different from that of the PC end. In terms of the mobile shopping industry, hardware differences of the PC end and the mobile end determine the trend of "simplified presentation forms and refined contents of webpages" of the mobile shopping. Such differences mainly involve the amount of information on commodities on single webpage, the switch and skip among several applications and the linkage and adaptation across the PC end and the mobile end. In future, the commodity layout and dynamic presentation of commodities of the mobile end will be more simplified, adjustments among shopping guide APPs or diversion APPs such as microblogs and WeChat will be more convenient, and settlement methods will be optimized and safer. The shopping experience and satisfaction of users at the mobile end will be further improved.

Chapter 8 Special Report on the Application of O2O Business Mode

In 2015, O2O industry ushered in new opportunities, for technical and economic situations became mature gradually, and the integrative development and online and offline channels became a trend. New technologies, products, business types and modes emerged at a faster pace, and O2O was widely applied in all the fields. This special report focuses on the development conditions of the O2O industry in China in 2015, primarily describes the development overview of the O2O market and the application in business fields and other ones in 2015, and expects the development trend of the O2O business mode in 2016.

8.1 Status quo of the O2O business mode

8.1.1 Development background of the O2O business mode

O2O, i.e. online to offline, refers to a business mode mutually integrating online and offline business activities. As long as a mode involves both online activities and offline activities in an entire industrial chain, the mode can be called O2O mode. This business mode covers a wide range. Group-buying websites are regarded as the earliest O2O mode. In 2010, group-buying websites emerged in China, and lots of group-buying websites were launched successively. Besides group-buying, various classified information websites, comment websites, meal ordering websites and so on successively had a try of O2O. Business WiFi, cloud computing, big data, DSP, LBA, mobile payment, mobile customer services and other technologies keep development, providing good development opportunities for O2O. In recent years, the growth rate of the O2O market has exceeded 30%, and the popularity rate of O2O of local life service type has been as high as 40%.

Along with the continuous and fast growth in the Internet economy, the government has been issuing policies to further support O2O development. In 2015, the Report on the Work of the Government proposed that "the emerging consumption with the Internet as carrier and online and offline interactions should be developed vigorously"⁽ⁱ⁾. In September 2015, the State Council specially issued the Opinions on Promoting Online and Offline Interaction to Accelerate the Innovative Development, Transformation and Upgrading of Commerce Circulation⁽ⁱ⁾, in which the transformation and upgrade of O2O, especially the O2O of entity retails, were mentioned in policies for the first time. A series of favorable policies generated a huge market space. Besides, venture capital guidance funds and policies including the Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force⁽ⁱ⁾ (hereinafter referred to as "the Opinions") have provided policy supports for the transformation and upgrading of O2O of traditional enterprises. The Opinions require a decrease in taxes and burdens by e-commerce enterprises and the inclusion of relevant industries such as the e-commerce of tourism and life services into the scope of "VAT in lieu of business tax", increasing development impetuses for the development space of emerging business modes such as O2O.

In respect of technologies, smartphones have been popularized, the coverage rate of WiFi has risen, LBS technologies have been developed and widely applied, infrastructures and technological conditions of online and offline combination have become mature gradually, and the informatization of traditional industries has been rising in respect of supply chain technologies, financial payments and logistics system. Merchants widely apply information technologies of supply chain management, custom relations management and cloud services. In respect of economy, O2O industry is favored in the capital market. Especially in fields of catering, transportation, fresh food, etc., multiple environments have been mature. The O2O develops rapidly in all the fields.

⁽ⁱ⁾ Li Keqiang. Report on the Work of the Government (2015) [EB/OL] (March 5, 2015) [March 16, 2016].

http://www.gov.cn/guowuyuan/2015-03/16/content_2835101.html.

^(®) General Office of the State Council. Opinions of the General Office of the State Council on Promoting Online and Offline Interaction to Accelerate the Innovative Development, Transformation and Upgrading of Commerce Circulation [EB/OL] (September 18, 2015) [February 26, 2016].

http://www.gov.cn/zhengce/content/2015-09/29/content_10204.htm.

[®] State Council. Opinions of the State Council on Striving to Develop E-commerce to Speed up the Cultivation of New Economic Driving Force [EB/OL] (May 7, 2015) [January 26, 2016]. http://www.gov.cn/zhengce/content/2015-05/07/content_9707.htm.

8.1.2 Status quo of development background of the O2O business mode

In the two years before, lots of O2O e-commerce platforms have emerged in China, impelling the rapid development of the O2O market. In 2015, the O2O market scale was RMB879.7 billion. It is expected that the market scale will reach RMB1,590.1 billion, with the compound annual growth rate (CAGR) of 29.3% and online penetration rate over 7% (refer to Figure 8-1). According to data of iResearch, the rapid development of the O2O market in China was impelled by the rapid development of vertical industries. Since 2014, the CAGRs of wedding, catering, parent-child and leisure and entertainment O2O markets have been over 24%.



Figure 8-1 O2O market scale and penetration rate in China

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews



Figure 8-2 Percentages of O2O market shares in China

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews

Vertical industries developed rapidly, and market shares of catering, hotels and wedding industries rose in consecutive years. In terms of O2O market pattern, in 2015, the percentage of O2O market shares of tourism was 48.3%, which ranked the first; that of online catering industry and online education industry was 16.2% and 13.6% respectively; that of leisure and entertainment, hotels and wedding was respectively 9.8%, 9.7% and $0.9\%^{\circ}$ (refer to Figure 8-2).

8.1.3 Market pattern of O2O business mode

In terms of the overall market pattern in 2015, giants successively made overall arrangements for the O2O market by virtue of capital strength thereof. In respect of community O2O, Alipay has been opening the e-commerce service platform based on "interconnection + IOT + services" for property industry, and has realized strategic cooperation with the domestic one-stop community service platform -- "Qding.me" in community service field to jointly construct a new community ecology. Together with WeChat payment, the property company under Zhenro has launched the first WeChat customized community in China. "Entry by swiping face", "parking by scanning code" and so on can be realized in the way of WeChat customization. RRS.com under Haier established a new company -- "Lejia" to rapidly conduct intelligent delivery locker business by virtue of advantages of more than 30,000 physical stores in China. In respect of local life O2O, Daojia.com obtained the A round of financing of US\$ 300 million from Alibaba Group, KKR and Ping An Ventures. In future, it may further intensify its market status in the business of housekeeping, beauty industry, moving and so on. Additionally, Alibaba, Tencent and other Internet giants competitively promoted the open application of mobile payment platforms. Yintai, Wangfujing, shopin.net and other traditional department stores successively had a try too. The O2O innovation and venture activities in fields of take-out, automobiles, medical treatment, fresh food, real estate, etc. have been conducted vigorously, and have attracted a lot of capital. For example, hundreds of O2O venture teams including Dingdongxiaogu focusing on community services, Helijia focusing on manicure, Home-Cook focusing on catering and Mr. Food focusing on fresh food all obtained external investments in 2015. However, the O2O market pattern has not formed yet, and the entire market still has a huge development space and potential.

8.2 Application of O2O mode in business fields

8.2.1 Application of O2O business mode in local life service industry

O2O was applied in local life service fields the earliest. Especially, traditional industries of catering, housekeeping, etc. integrated with e-commerce the most apparently. Now, the O2O market of local life service in China is still at the initial phase of development. O2O primarily provides consumers with convenient services in fields of catering take-out, housekeeping washing, beauty and hairdressing, leisure and entertainment, etc.

In 2015, the O2O market scale of catering in China was near RMB 142.3 billion, with CAGR up to 42.8% (refer to Figure 8-3).

The catering O2O development is primarily ascribable to the following reasons. On the one hand, life service e-commerce platforms have been popularized: for example, Eleme, waimai.meituan.com, waimai.baidu.com and other online take-out ordering platforms operate in good conditions, and new catering O2O mode such as chef going to home and private cook are in the favor of users; on the other hand, life service e-commerce platforms have been supported by third-party platforms such as WeChat payment and Alipay payment, leading an increasingly high viscosity of consumers. The O2O mode has not only improved the marketing ideas and schemes of traditional businesses, but also expanded the selection scope of consumers for their demands. Especially, the application of mobile interconnection O2O and local life and social exchange platforms have provided value-added services of interconnection for the mobile consumption and community consumption of consumers, and have built a consumption ecosystem of "eating, drinking, playing, entertainment and shopping".

⁽⁰⁾ The O2O market scale is the sum of the O2O market scales of segmented industries of catering, wedding, leisure and entertainment, parent-child, beauty and skin care, hotels and online tourism; O2O penetration rate = online market scale / overall market scale x 100%; the online penetration rates of different segmented industries are calculated by synthesizing opinions of industrial experts, public materials and accumulated researches of iResearch.



Figure 8-3 O2O market scale and penetration rate of catering in China

Source: calculation according to iResearch statistical model and by synthesizing financial reports of enterprises and expert interviews

In April 2015, the two major life service e-commerce platforms -- 58.com and ganji.com were merged, which would greatly change the industrial pattern of the O2O market of life services.

8.2.2 Application of O2O business mode in traditional retail industry

After many years' development, China's traditional retail industry is now confronted with many problems including shrinking market and rising costs. More and more traditional retail enterprises have begun to realize that they should deepen the integration with Internet in respect of internal operation, market promotion, product sales, etc. In 2015, some retail giants successively access quick payment ports such as WeChat payment and Alipay payment, started the entire-channel transformation of online services for offline deals, and established the new ecology of online and offline integration.

The year 2015 is the key year of transformation and upgrading of entity retail industry in China. Traditional enterprises kept providing online business services via Internet, and expanded their own business scope by virtue of third-party platforms. In the meantime, Alibaba, JD.com, Baidu, Tencent and other Internet enterprises successively expanded offline merchants and made the overall arrangements for retail O2O and service O2O. In respect of traditional retails, take Suning as an example of a retail enterprise conducting e-commerce business. Suning has done a lot of work for its O2O mode in respect of platform integration, supports for system construction and channel connection. Wangfujing has started entire-channel marketing, launched Tmall flagship store, and mobile stores on Tmall APP and Taobao APP, and fully connected the offline credit payment products of JD.com consumption finance and JD.com payment. In terms of traditional department stores and supermarkets, Vanguard has launched "ewj.com" of e-commerce, focusing on fresh food and cross-border purchase, and launched new-type convenience supermarket of "Legou express" equipped with "e-commerce transfer stations" and "goods self-pickup cabinets". The feiniu.com under RT-MART, a comprehensive retail shopping websites with all the categories primarily self-run, provides consumers with seamless shopping experience by virtue of physical store advances and "O X O" supply chain output mode of RT-MART. Walmart has launched the hypermarket O2O service platform -- "Walmart China to Go", on which customers can select commodities via Walmart APP online, and pick up commodities at an offline store or make them delivered to home. In respect of electric appliance retails, Haier promotes products by the emerging network pre-sale mode of WeChat, microblog, etc. In respect of cross-border department stores and supermarkets, Chong General Trading Group, by virtue of advantages of Chongging as a pilot cross-border e-commerce city in China, has launched the online cross-border ecommerce website -- sigo365.com. The vunhou.com has participated in cross-border e-commerce by integrating offline physical store resources, cooperates with bonded areas in Zhengzhou, Guangzhou and so on, and has set offline cross-border e-commerce experience flagship stores in Ningbo, Changsha, etc.

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8.2.3 Application of O2O business mode in wholesale industry

As Internet technologies and warehouse logistics develop rapidly, traditional wholesale industry speeds up the transformation and upgrading of business types. Humen Daying Clothes E-commerce Town of Dongguan, with more than 2,000 merchants, has innovated in the new O2O mode of clothes wholesales by cooperating with Alibaba, on the basis of traditional clothes wholesales and in the way of online and offline combination. Haining Leather City famous for leather has officially launched mobile phone APP, realizing the shopping mode of online interactions and offline services. Beijing Zoo Clothes Wholesale Market, as a representative effectively relieving the pressure of urban functions, has realized the new O2O business mode of "offline physical store experience wholesales + online e-commerce wholesale transactions" by building zoo wholesale network and relying on the big data of Internet, has been building platform brand, and has propelled the strategic layout of integration of online and offline resources.

8.2.4 Application of O2O business mode in business service industry

At present, the O2O mode has penetrated in service industry more and more. First-tier cities such as Beijing and Shanghai has been promoting the construction of intelligent communities and modern communities, and has achieved service functions like reservation and payment through the O2O mode step by step, in order to meet consumption demands of residents. In respect of connection of traditional business enterprises with e-commerce enterprises, they actively organized department stores and supermarkets, old and famous shops or enterprises and other traditional enterprises to connect with e-commerce leading enterprises, promoting the transformation and upgrading of traditional enterprises, and pushed forward online and offline integrative development. They made full use of advantages of O2O online activities, and organically combined online marketing and offline marketing. The application of the O2O mode has enhanced the efficiency of service industry, reduced intermediate service links, and optimized service experience. Industries of enterprise management, legal services, consulting and investigation, advertising, etc. successively have a try of O2O. Compared with high-frequency O2O service market of local life services, such service platforms primarily promote the conclusion of service transactions of C end and small and medium B end, and are deeply popular on the market by virtue of characters such as region crossing, business diversification, high efficiency, etc.

8.3 Application of O2O business mode in other fields

8.3.1 Application of O2O business mode in traditional industrial enterprises

Premier Li Keqiang clearly defined the C2B mode at the executive meeting of the State Council in January 2016: consumers propose requirements, and manufacturers design consumables and equipment accordingly. By the close connection to market via Internet, enterprises flexibly communicate with consumers at any time. Strategies of "Made in China 2025" and "Internet +" have put forward the route of transformation of manufacture industry: rapidly meeting customized demands of users in the Internet age. In future decade, Internet platforms will help traditional enterprises to apply Internet and realize the "stock reform" of transfer to online. Development directions of new industrialization are to optimize structures of manufacture industry and service industry, enhance the quality and level of products and services, and push forward customized and flexible production.

Haier, Sunpizz Kuching Interior Design, Markor Home Furnishings and other enterprises have made outstanding breakthroughs in respect of C2B. Haier firstly launched "Internet + electric appliance customization" and the crowd innovation gathering platform of customization of Haier (diy.haier.com). Users can participate in the whole customization process by means of module customization, crowd innovation customization and exclusive customization, and conduct zero-distance interactions with designers, engineers, products, etc. By virtue of "Internet + clothes customization", Qingdao Red Collar Group has realized the transfer from large-scale manufacture to large-scale customization, has formed C2M business ecology, and has satisfied personal demands of users. The KIS software of the flagship version developed by Kingdee has integrated big data, cloud platform and mobile Internet technologies, gotten through links of network marketing, order processing, allocation and delivery of goods and so on of enterprises, achieved the integration of business processes under the O2O mode, helped more than 5,000 SMEs enter into e-commerce fields, and vigorously promoted the transformation and upgrading of business modes of SMEs.

8.3.2 Application of O2O business mode in logistics industry

Along with the emerging of O2O door-to-door services of take-out, fresh food, washing, etc., logistics freight market has ushered in a broader development space. In respect of crowdsourcing logistics, crowdsourcing modes such as Dada, www.rrkd.cn, JD Crowdsourcing, instant delivery and rapid receipt are popular in the market. In respect of self-constructed logistics, logistics platforms serving O2O distribution have sprung up like mushrooms. For example, as compared with scattered logistics such as crowdsourcing, MEISHISONG.CN providing consumers with featured delicious food and restaurant take-out services, has more guarantees in respect of service level and aging quality. In respect of freight O2O, Yi Hao Huo Di, No. 1 Van, lanxiniu.com, yunlala.com and other O2O platforms of freight in the same city have effectively solved the information asymmetry between vans and owners of goods, and have saved the time costs of the owners of goods and enhanced the operation efficiency of owners of vans. HuoLala and Loji Logistics innovate in the freight O2O mode by means of application of order scrambling by owners of vans.

8.3.3 Application of O2O business mode in financial payment field

Alibaba, JD.com, Tencent and other enterprises develop rapidly in the Internet finance field. Alibaba focuses on the establishment of O2O closed loop by Alipay; Tencent promotes WeChat payment products for the purpose of viscosity of users by relying on the huge user traffic social contact platforms; JD.com has taken O2O finance as strategic core, and renamed JD.com wallet, JD.com payment, etc., and by integrating online advantages, provide more convenient and diversified financial services for offline merchants. Traditional commercial banks also speed up the financial business based on Internet, for example, new modes such as online banking, mobile banking, e-payment, WeChat bank and direct bank. In future, offline market will be contended for. The online development of assets management speeds up, and the combination of O2O and P2P modes will become closer.

8.4 Development trend of the O2O business mode

8.4.1020 will penetrate to second-tier and third-tier cities

Along with Internet popularization and application of Internet and the improvement of consumption level and living level, community service demands of users in second-tier and third-tier cities and the O2O acceptance and application degrees have been enhanced largely. The O2O consumption in the first-tier city will be transformed from increment to quality improvement, and that in the second-tier and third-tier cities has entered into rapid development phase. Along with the network environment construction and the rise of industrial supporting capacity in second-tier and third-tier cities, in future, priority will be given to the cultivation of O2O consumption habits of users and the rapid expansion of user scale. In respect of city positioning, the O2O users in second-tier cities have the strong will in respect of social exchanges, interactions and sharing, which are the strategic distribution points urgent to be depend in the O2O market, and are urgent to convert business and entertainment demands into O2O demands by promoting O2O product services and enhancing the experience satisfaction of users of O2O websites and APP users. The O2O users in third-tier cities are enthusiastic about social platforms, video websites, entertainment websites and so on, and social networking and entertainment will be good platforms transferring O2O demands thereof. Besides, the percentage of users using mobile phone payment in the third-tier cities is high, and the mobile end is the main carrier promoting the cultivation of their O2O habits. In segmented fields, market opportunities of catering O2O and vehicle calling O2O are obvious, and leisure O2O and housekeeping O2O will be priorities of next step.

8.4.2Logistics distribution capability of O2O enterprises becomes a key

The construction of logistics infrastructures speeds up, and the competition of "last mile" is fierce. The emerging of O2O has stimulated the development of logistics distribution services. Along with the cultivation of shopping habits, people have increasingly higher requirements for logistics time and services. Good logistics are necessary conditions for market occupation. The efficiency and quality of the last mile determine the quality of O2O services to a large extent. The construction of logistics infrastructures will become a priority of offline arrangements. In future, the competition in logistics of "last mile" among enterprises will be increasingly fierce. The last-mile distribution efficiency should be enhanced by strengthening infrastructure construction and making overall arrangements for logistics in the same city. The LBS technologies should be based to deploy delivery employees in order to reduce costs and effectively enhance distribution efficiency, and offline services are managed through online terminal, thereby realizing the control and supervision over the whole process of distribution. The track of distribution progress, control over goods and real-time sharing of aftersales resources should be realized by establishing platforms for online reservation and offline enjoying of services. The construction of a judgment system of value of good faith of logistics and delivery persons should be consolidated to realize the standardized control over logistics and distribution.

8.4.3020 enterprises will reinforce overall arrangements for the mobile end

In recent years, the mobile Internet has been keeping a high-speed development trend, driving ecommerce to speed up the transfer from the traditional PC end to the mobile end. The mobile ecommerce is becoming a new force of current e-commerce development, and has started a new space of e-commerce development. As compared with the PC end, mobile shopping is less restricted by time and space, and interacts with offline consumption scenarios more conveniently. In terms of traditional enterprises, the mobile end is an important link of the entire-channel control thereof, and plays an important role in enhancing enterprise reputation, expanding consumption radius, enhancing users' experience and so on. In future, the mobile end market potential will be limited. Some O2O enterprises aim at the mobile market, and give the priority of transformation to the development of the mobile end. The accelerated penetration of the mobile Internet has been driving the competitive development of O2O applications in all the fields.

8.4.4020 services boosts the informatization construction of enterprises

The O2O mode has increased the revenue of enterprises, promoting enterprises to speed up informatization construction to enhance service efficiency and thereby obtain more earnings. Internet technologies such as big data, cloud platforms and the mobile Internet have been changing the business mode of enterprises. Some retail enterprises increase experience consumption functions at traditional sales outlets, promoting the organic integration of network marketing with store sales. Manufacturing enterprises expand network sales scale by virtue of existing brand advantages, resources of physical and online stores and logistics distribution systems, intensify product publicity through network consulting, network advertising, online interactions and exchanges, etc., and realize the interaction mode of offline contract sales. In respect of local life services, the enhancement of informatization and technical capability not only cuts down the experience time of consumers, improves users' experience and increases the viscosity of users, but also is greatly helpful in attracting merchants.

8.4.5020 services develop towards vertical segmentation and differentiation

As people continuously deepen the understanding of the O2O mode, the convenience brought by this consumption method for users has appeared day by day. In view of increasingly diversified and personalized demands of consumers, the O2O mode has begun to penetrate to other segmented industries including vehicle renting and calling, housekeeping services, vehicle services, medical services and online education. In view of arrangements of three giants of BAT (Baidu, Alibaba and Tencent) in the vertical O2O markets: Baidu acquired nuomi.com to focus on vertical O2O film industry field; the Automotive Business Department of Alibaba cooperates with 40 enterprises in the automobile industrial chain including BMW and Buick; Tencent has been establishing the "pan-entertainment" concept covering film and television, animation, culture, etc. The three giants have successively made arrangements for expanding the vertical O2O market occupation rate. In face of races of O2O giants in the market, SMEs can take a place among the fierce competition on the O2O market only by deepening services and providing differentiated services.

8.4.6 Application of new technologies has propelled the rapid development of O2O

Cloud computing, big data, intelligent search, the Internet of Things and other new technologies can position consumers, provide services like one-touch payment and navigation, and construct the panoramic view of consumers and the business analysis of time and space. Merchants attract customer flows as per the heat map of customer flows, brand preferences, brand relevancy and other data. Regarding the analysis of big data, JD.com has launched innovative "zq.jd.com", which, by synthesizing proprietary e-commerce data and geographic information data of QQ Map, helps offline merchants and O2O operators to realize precise business decisions and enhances offline business operation efficiency. The marketing strategy launched by Baidu by virtue of the technologies and big data analysis thereof precisely matches demands of merchants, which not only solves consumer demands, but also helps merchants with refined operation. Concerning positioning and navigation, the panoramic map launched by nuomi.com provides the 360-degree view of interior and exterior views of restaurants, meeting demands and selection needs of users. With regard to the application of the Internet of Things, Tencent and Evergrande jointly establish an online platform of Internet community services so as to provide community users with O2O one-stop services like intelligent communities, intelligent housing and community finance.

Chapter 9 Special Report on the Development of E-commerce Entrepreneurship and Employment

Along with the rapid development of e-commerce worldwide, more and more enterprises and individuals have participated in e-commerce. It is necessary to further optimize development environment and enhance the e-commerce entrepreneurship and venture, so as to accelerate e-commerce of China and broaden entrepreneurial wealth channels. This special report fully describes the basic conditions of e-commerce entrepreneurship and employment and entrepreneurship and employment environment, and expects future development direction and trend.

9.1 Status quo of e-commerce entrepreneurship and employment

9.1.1 Basic conditions

In 2015, with the impetus of the Guiding Opinions of the General Office of the State Council on Development of Group Innovation Space and Promotion of Public Innovation and Entrepreneurship⁽¹⁾, governments of all the regions sped up the promotion for the public to start businesses and make innovations, and strove to create an innovation and entrepreneurship ecosystem full of vitality and vigor and optimize the environment of the public to start businesses and make innovations. As the core of "Internet+" action plan, e-commerce has become a new engine for the public to start businesses and make innovations.

According to the statistics of the State Administration for Industry and Commerce[®], in 2015, 14,798,000 market subjects were newly registered in China, up by 14.5% as compared with 2014, and registered capital (funds) thereof amounted to RMB30.6 trillion, up by 48.2%; 4,439,000 enterprises were newly registered in China, up by 21.6% as compared with 2014, and registered capital (funds) thereof amounted to RMB29 trillion, up by 52.2%; 12,000 enterprises were newly registered every day on average, significantly increasing as compared with the average daily newly registered enterprises in 2014. As at the end of 2015, China had 77,469,000 various market subjects, up by 11.8%, and registered capital (funds) thereof amounted to RMB 175.5 trillion, up by 35.8% year on year. Especially after the "three in one and one code for one license" registration system reform was comprehensively implemented in China as from October 1, the quantity of newly registered enterprises continually hit a record high.

In view of industrial distribution, the tertiary industry developed fast. In the first half of 2015, 1,607,000 enterprises in the tertiary industry were newly registered in China, up by 22.6% as compared with the same period of 2014 and accounting for 80.3% of all the newly registered enterprises. In particular, modern service industry developed especially fast, showing many highlights. The 106,000 enterprises in the information transmission, software and information technology service industries were newly registered, up by 70.9%[®]. E-commerce, as a typical representative of modern service industry, is primarily classed as wholesale and retail industry and information technology service industry.

[®] General Office of the State Council. Guiding Opinions of the General Office of the State Council on Development of Group Innovation Space and Promotion of Public Innovation and Entrepreneurship [EB/OL] (March 11, 2015) [February 23, 2016]. http://www.gov.cn/zhengce/content/2015-03/11/content_9519.htm.

⁽²⁾ General Office of State Administration for Industry and Commerce. 2015 Regular Press Conference of the State Administration for Industry and Commerce [EB/OL] (February 24, 2016) [April 13, 2016].

http://www.saic.gov.cn/ywdt/xwfb/201602/t20160224_166788.html.

[®] State Administration for Industry and Commerce. Information on Development of Market Subjects, Market Supervision and Protection of Consumers' Rights in China in the First Half of 2015 [EB/OL] (July 15, 2015) [February 23, 2016]. http://www.saic.gov.cn/zwgk/tjzl/zhtj/xxzx/201507/t20150715_158914.html.

The former accounted for 35.8% of the overall industrial distribution of small and micro enterprises newly registered in one year after reform (refer to Figure 9-1), while the later was the industry with the fastest growth in newly registered enterprises[®]. The rapid development of e-commerce and great supports of policies in China have inspired the enthusiasm of individuals and enterprises for establishing e-commerce enterprises.



Figure 9-1 Industrial distribution of small and micro enterprises newly registered in China from March 1, 2014 end of February 2015

Source: Research group of analysis of relations between enterprise development and macroeconomic development of the State Administration for Industry and Commerce, 2015

The public to start e-commerce business is becoming hot, especially in e-commerce leading cities like Shanghai, Guangzhou and Hangzhou[®]. "Density of e-commerce operators" (i.e. the quantity of e-commerce operators per 10,000 persons on average) in the Alibaba e-commerce development index (aEDI) is an indicator measuring the active degree of the public to start e-commerce business in a region. Based on the analysis of this indicator, the "Ranking List of Public E-commerce Entrepreneurship in China in 2015" was formed (refer to Figure 9-1). In 2015, the cities ranking top five in respect of the active degree of public e-commerce entrepreneurship in China were Guangzhou, Jinhua, Shenzhen, Hangzhou and Zhongshan in order. Such entrepreneurship was primarily distributed in 13 provinces and cities in eastern coastal areas.

Ranking	City	Province	Ranking	City	Province	Ranking	City	Province
1	Guangzhou	Guangdong	18	Ningbo	Zhejiang	35	Chengdu	Sichuan
2	Jinhua	Zhejiang	19	Shantou	Guangdong	36	Fuzhou	Fujian
3	Shenzhen	Guangdong	20	Chaozhou	Guangdong	37	Jinan	Shandong
4	Hangzhou	Zhejiang	21	Jieyang	Guangdong	38	Hefei	Anhui
5	Zhongshan	Guangdong	22	Shaoxing	Zhejiang	39	Xingtai	Hebei
6	Dongguan	Guangdong	23	Changzhou	Jiangsu	40	Lianyungang	Jiangsu

Table 9-1	50 cities with active public e-commerce entrepreneurship in China in 2015 [®]
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[®] Research group of analysis of relations between enterprise development and macroeconomic development of the State Administration for Industry and Commerce. Entry of China's Business System Reform into Fast lane, Significant Growth in market Subjects and Obviously Improved Business Environment [EB/OL] (December 16, 2015) [March 23, 2016]. http://www.saic.gov.cn/zwgk/tjzl/zhtj/xxzx/201512/t20151216_164978.html.

[®] Ali Research Institute. Ranking List of Public E-commerce Entrepreneurship in China in 2015 [EB/OL] (March 9, 2016) [April 14, 2016]. http://www.aliresearch.com/Blog/Article/detail/id/20851.html.

Notes: (1) The indicator used in this research to measure the active degree of public e-commerce entrepreneurship in all the regions is the density of e-commerce operators (quantity of e-commerce operators / population), i.e. "the quantity of e-commerce operators per 10,000 persons on average". (2) Research samples include cities at the prefectural level or above.

							1
7 Wenzho	u Zhejiang	24	Zhuhai	Guangdong	41	Suqian	Jiangsu

								Continued
Ranking	City	Province	Ranking	City	Province	Ranking	City	Province
8	Jiaxing	Zhejiang	25	Zhengzhou	Henan	42	Shijiazhuang	Hebei
9	Putian	Fujian	26	Huizhou	Guangdong	43	Hengshui	Hebei
10	Taizhou	Zhejiang	27	Wuhan	Hubei	44	Changsha	Hunan
11	Quanzhou	Fujian	28	Nanjing	Jiangsu	45	Baoding	Hebei
12	Shanghai	Shanghai	29	Wuxi	Jiangsu	46	Zhenjiang	Jiangsu
13	Suzhou	Jiangsu	30	Lishui	Zhejiang	47	Jiangmen	Guangdong
14	Foshan	Guangdong	31	Nantong	Jiangsu	48	Taizhou	Jiangsu
15	Huzhou	Zhejiang	32	Qingdao	Shandong	49	Langfang	Hebei
16	Xiamen	Fujian	33	Yangzhou	Jiangsu	50	Weihai	Shandong
17	Beijing	Beijing	34	Xuzhou	Jiangsu			

Source: Ali Research Institute. Ranking List of Public E-commerce Entrepreneurship in China in 2015. 2016

Among 50 cities with active public e-commerce entrepreneurship in China, 28 ones are "national e-commerce demonstration cities", accounting for 56%. In particular, 7 demonstration cities rank among the top ten in China. Such demonstration cities enhanced the active degree of public e-commerce entrepreneurship (refer to Figure 9-2).

Ranking	City	Ranking	City	Ranking	City
1	Guangzhou	16	Xiamen	32	Qingdao
3	Shenzhen	17	Beijing	34	Xuzhou
4	Hangzhou	18	Ningbo	35	Chengdu
6	Dongguan	19	Shantou	36	Fuzhou
7	Wenzhou	21	Jieyang	37	Jinan
9	Putian	23	Changzhou	38	Hefei
10	Taizhou	25	Zhengzhou	42	Shijiazhuang
11	Quanzhou	27	Wuhan	44	Changsha
12	Shanghai	28	Nanjing		
13	Suzhou	29	Wuxi		

 Table 9-2
 E-commerce demonstration cities ranking among the top 50 in China in respect of the active degree of public e-commerce entrepreneurship

Source: Ali Research Institute. Ranking List of Public E-commerce Entrepreneurship in China in 2015. 2016

When e-commerce develops rapidly, e-commerce enterprises have increasingly more demands for ecommerce talents of skill and practicing type. The traditional talent cultivation method of higher educational institutions has not been able to satisfy talent demands of enterprises. In addition, college students starting businesses and employed are confronted with problems including inter-provincial flow and storage of individual archives, household registration and difficulty in buying social insurance. Such problems are urgent to be coordinated about and solved by relevant government departments in order to eliminate worries behind of entrepreneurs.

9.1.2 Government promotion

1. Guidance and promotion of all the departments under the Central Government

Relevant departments actively responded to national calls, and comprehensively implemented measures such as "public entrepreneurship and innovation", reform of the business system and finance and tax policies; deeply conducted special activities assisting small and micro enterprises, conducted the activity of publicity month of policies for small and micro enterprises nationwide, made small and micro enterprises learn about and enjoy relevant policies by means of newspapers and periodicals, network, microblog and WeChat, promoted the conversion of results of "public entrepreneurship and innovation" and expanded a new space of network economy.

(1) Further intensify financial and tax supports. Upon approval by the State Council, the Central Government contributed RMB15 billion and widely attracted social capital to jointly form the Small and Medium Enterprise Development Fund of the state of RMB60 billion. The Ministry of Finance, Ministry of Industry and Information Technology, Ministry of Science and Technology, Ministry of Commerce and State Administration for Industry and Commerce conducted the work of "demonstration of base cities of entrepreneurship and innovation by small and macro enterprises", promoting the development of medium, small and micro enterprises with urban entrepreneurship and innovation new bases. Continuously depended tax policies benefiting enterprises, rose the standard to RMB 0.3 million for a 50% reduction in income tax of small and micro enterprises, and increased the monthly sales amount from RMB 20,000 to RMB 30,000 for the tax threshold of the VAT and business tax of small and micro enterprises. Reduced the premium rates of unemployment insurance, work-related injury insurance and maternity insurance, and made efforts to eliminate enterprise burden.

(2) Further strengthened financing supports. Comprehensively impelled local competent departments of SMEs and branches of banks to establish a cooperation mechanism, and guided financial institutions in banking industry to increase the credit availability of large, small and micro enterprises. The State Administration of Taxation continuously conducted the work of exemption of credit guarantee institutions for SMEs from the business tax, and as per requirements of the administrative examination and approval system reform of the State Council, defined that tax exemption policies should be implemented continuously in the form of filing. Pushed forward the cooperation between insurance institutions and guarantee institutions, and enhanced the capability of guarantee institutions of preventing risks.

(3) Further inspired the vitality of innovation and entrepreneurship. Conducted the cultivation and identification of demonstration bases of entrepreneurship and innovation of small and micro enterprises of the state, vigorously pushed forward "Internet + small and micro enterprises", and advanced the informatization of small and micro enterprises and the networking of public services. Guided informatization service providers to conduct online and offline trainings and application promotion activities of nearly 10 million person-times for SMEs. Built the public service platform of "Maker in China", and held the contest of "Maker in China". Actively implemented the industrial cluster development, strengthened specialized cooperation and supporting facilities, and promoted transformation and upgrading. Implemented the strategic promotion project of intellectual property rights of SMEs, and conducted the pilot trust of intellectual property rights in 59 agglomeration areas of SMEs.

(4) Further improve public service system. The Ministry of Industry and Information Technology implemented the network construction engineering of public service platforms of SMEs, supporting 30 provinces and 5 cities specifically designated in the state plan to build the public service platform networks of SMEs. As at the third quarter of 2015, 895 platforms participated in the platform network construction, driving 75,100 various social service institutions. 188,000 service activities were organized for the demands of small and micro enterprises, serving 1,835,800 enterprises (times). Improved the expert library of management consulting of SMEs. The Ministry of Education organized the online 100-day college graduate recruitment activity for SMEs in China. The 9,046 enterprises released recruitment information online, providing nearly 100,000 employment posts, and 258,000 college graduates submitted job hunting information.

Further strengthened market development. Continuously deepened bilateral and multilateral cooperation mechanisms. The Ministry of Industry and Information Technology organized the China-Europe dialogue about policies for SMEs and so on. Fostered Sino-foreign SMEs cooperation parks, and boosted the building of platforms of economic and trade cooperation of SMEs. Held the 12th China International Small and Medium Enterprises Fair and so on, building platforms of exhibition, presentation, cooperation and transaction for SMEs and promoting the flow and sharing of innovation elements including talents, technologies, capital, services and information.

2. Work of local governments at all levels

Local governments insisted on the promotion by reforms, kept innovating in systems and mechanisms, perfected generally preferential policy measures, constructed a policy environment favorable for entrepreneurship and innovation, and impelled employment by entrepreneurship.

Zhejiang issued policy documents supporting the public to start businesses to promote employees, improved the system of venture guarantee loans, and created an environment tolerant of entrepreneur failures; Guangxi Zhuang Autonomous Region issued "eight provisions of Guangxi" on employment and entrepreneurship, making innovations and breakthroughs in respect of encouraging enterprises to develop new posts, expanding employment capacity, supporting public entrepreneurship and innovation and encouraging the employment and entrepreneurship by college graduates; Shaanxi advanced the promotion of employment by entrepreneurship with market mechanism, by applying the new mode of "construction of market subjects + market operation + government supports + entrepreneurs"; in combination with practices, Shanghai implemented a new round of three-year action plan encouraging the promotion of employment by entrepreneurship, and mainly guided and impelled the development of innovation and entrepreneurship service carriers such as maker spaces; Dalian made every effort to deepen reform, insisted on the promotion by innovation, developed market-oriented and specialized maker space, built entrepreneurship and innovation service platforms, and formed the "Dalian strength" of entrepreneurship and innovation; Beijing, Jilin, Shandong, Zhejiang, Changchun, Hefei and other provinces and cities developed new entrepreneurship and employment service platforms such as marker spaces by organizing entrepreneurship and employment forums, summits and expos, organizing activities themed on "public entrepreneurship and innovation" and entrepreneurship contests, in a bid to further inspire the vitality of entrepreneurship and innovation.

9.2 Internet entrepreneurship subjects

9.2.1 Internet entrepreneurship and employment of individuals

According to the Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students[®] issued by China Association of Employment Promotion in July 2015, the average number of persons employed by individual and enterprise online stores in China was respectively 1.6 and 6.93 in 2014. As calculated in that light, there were 10,037,200 persons directly starting businesses and employed by opening of online stores in China in 2014, excluding the emerging employment in e-commerce logistics and e-commerce service fields related to that directly, and the employment directly driven by upstream and downstream e-commerce. In respect of ages of owners of online stores, owners aged 25~34 accounted for 63.5%, those aged 24 or below accounted for 21.9%, those aged 35-44 accounted for 12.9%, and those aged 45 and above accounted for 1.7%. Internet entrepreneurs aged 25~34 were people born in the 1980s, while those aged 18~24 were people born in the 1990s. Among the internet entrepreneurs, post-1980s and post-1990s youths accounted for 85%, becoming absolute subjects. More than 80% of employees of online stores were the youths aged below 34, and more than a half of such employees had the college degree or above. Table 9-3 indicates the structure of gender, age and degree of education of employees of online stores on the e-commerce platforms of Alibaba.

	Category	All the online stores (%)
Gender	Female	49.2
Gender	Male	50.8
	24 years old and below	29.7
	25~34 years old	50.6
Age	35~44 years old	12.9
	45 years old and above	6.9
	Middle school and below	13.8
	Senior high school (including technical secondary school and technical school)	30.7
Degree of education	Junior college (including higher vocational and technical college)	31.8
	Bachelor	21.0
	Postgraduate and above	2.7

Table 9-3	Structure of gender, age and degree of education of employees of online stores on the e-commerce
	platforms of Alibaba

Source: China Association of Employment Promotion. Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students. 2015

In respect of the GMV of internet entrepreneurs, the turnover of half of individual online stores was less than RMB 2,000, the turnover of more than half of enterprise online stores was less than RMB 200,000, and more than half of owners of online stores had other income sources, with a small turnover of online entrepreneurship. Table 9-4 indicates the percentages of other income sources of owners of online stores with and without any other income source on the e-commerce platforms of Alibaba.

⁽ⁱ⁾ China Association of Employment Promotion. Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students [EB/OL] (July 29, 2015) [March 23, 2016]. http://www.zgjy.org/newlist/newstop.asp? MessageID=1814.

Whether there is	A	AII	College	students	Non-college students	
any other income source	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)
Without any other income source	3038	47.5	1674	43.4	1364	53.7
With any other income source	3356	52.5	2180	56.6	1176	46.3
Total	6394	100.0	3854	100.0	2540	100.0

Table 9-4 Other income sources of owners of online stores on the e-commerce platforms of Alibaba

Source: China Association of Employment Promotion. Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students. 2015

More than 70% owners of online stores only opened one online store. According to survey results, 70.7% of owners of online stores stated that they only opened one online store on various e-commerce platforms (including Taobao, Tmall, JD.com, yhd.com and paipai.com). 78.6% of online stores did not have a physical store, and operated online in full. Table 9-5 and Table 9-6 indicate the quantity distribution of online stores on the e-commerce platforms and the situation of possession of a physical store by such online stores of Alibaba

Number of online	All		College	students	Non-college students	
stores opened	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)
1	5250	70.7	3202	71.0	2047	70.2
2	1364	18.4	810	18.0	554	19.0
3	450	6.1	282	6.3	168	5.8
4	146	2.0	84	1.9	62	2.1
5 and above	216	2.9	130	2.9	86	2.9
Total	7426	100.0	4508	100.0	2917	100.0

Table 9-5 Quantity distribution of online stores on the e-commerce platforms of Alibaba

Source: China Association of Employment Promotion. Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students. 2015

 Table 9-6
 Situation of possession of physical stores by online stores on the e-commerce platforms of Alibaba

Whether any	All		College	students	Non-college students	
physical store is possessed	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)
Yes	1591	21.4	925	20.5	666	22.8
No	5834	78.6	3583	79.5	2251	77.2
Total	7425	100.0	4508	100.0	2917	100.0

Source: China Association of Employment Promotion. Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students. 2015

9.2.2"public entrepreneurship and innovation" of state-owned enterprises

1. Basic conditions

Since the State Council arranged the work of "public entrepreneurship and innovation", central enterprises have been attaching great importance, have been deepening the reform of state-owned enterprises and that of scientific and technological system, and have been actively promoting the work of "public entrepreneurship and innovation" by means of entrepreneurial incubation, venture capital fund, sharing of research and development resources, supports of technical supports, creativity activities of employees, etc. and according to the reality of enterprises. In October 2015, central enterprises took a lead in 141 national and local strategic alliances of technical innovations; 52 central

enterprises jointly initiated and participated in 179 funds, with the total scale of funds raised exceeding RMB 500 billion; 57 entrepreneurial and innovative incubation platforms facing the society, 27 entrepreneurial and innovative technical platforms and 23 entrepreneur and innovation activity platforms were established, vigorously driving the entrepreneurship and innovation of the whole society.

2. Conditions of "public entrepreneurship and innovation" of China Mobile

In August 2010, China Mobile started the "Plan on Entrepreneur and Employment of Millions of Young People" (hereinafter referred to as "the Plan"), in order to provide college students with a series of free entrepreneurial education, trainings and incentives and a certain quantity of entrepreneur and employment posts by relying on the Internet platform of China Mobile.

(1) An upsurge in mobile Internet development entrepreneur has been generated in higher educational institutions in China. Over the five years of implementation, the Plan has played an active role in helping college students change employment and entrepreneur concepts, improving employment and entrepreneur skills, providing employment internship opportunities, breaking through bottlenecks of entrepreneur funds, etc. By the end of 2015, the Plan has covered more than 2,000 colleges and universities in China, has successfully gathered 1,730,000 young developers, and has collected more than 1,110,000 entries; has constructed 102 incubation bases in 16 provinces and cities in China, including 90 employment incubation bases of higher educational institutions and 12 social entrepreneurial incubation bases; has invited 65 CEO, technical experts and marketing experts of famous enterprises to join in the "dream mentor group" to conduct speaking tours in China, providing entrepreneur tutorship and assistance and having cumulatively provided developers with more than 800 landing trainings; has cumulatively recruited 145 entrepreneur teams to take office. Incubation projects cover mobile games, Internet finance, O2O and e-commerce, online education, etc. More than 1,000 quality applications have been incubated, and the investment in 25 VC projects has been made successfully. In particular, 12 projects obtained the investment of venture capital institutions such as Legend Star, Innovation Works, Hillhouse Capital, SIG, BlueRun Ventures, ZQGAME.COM, Citibank Fund and LETV, with the largest sum of financing amounting to US\$ 22 million.

(2) Innovated in business mode by relying on the mobile Internet. By giving full play to advantages of network and user scale, China Mobile has organically combined the mobile Internet and traditional industries, and has innovated in digital new media issue mode. China Mobile has established five content bases, gathering a large number of quality resources (including 3 million songs of legitimate editions, videos of 2.3 million hours, 400,000 books, 340,000 episodes of cartoons and nearly 20,000 games) and providing users with the new experience of all-round audio-visual entertainment, and has created good efficiency for partners through reasonable business modes.

(3) Explored the introduction of the mode of innovation industry funds, and accelerated the industrialization and commercialization of scientific and technological achievements. China Mobile contributed RMB 1.5 billion to cooperate with State Development & Investment Corp. in establishing the "China Mobile Innovation Industry Fund", which supports the innovative development of the mobile Internet, Internet of Things, cloud computing and big data as well as relevant enterprises of the upstream and downstream value chain of communication industry.

(4) Optimized internal innovation mechanisms of enterprises, and assisted in the sustainable development of enterprises. Firstly, innovated in scientific research system, and implemented the R&D layout of "one subject and three circles". That is to say, established central research institute and Suzhou and Hangzhou R&D centers, intensified R&D force of inner circle, encouraged the collaboration of R&D of professional companies and bases of middle circle, and guaranteed the implementation of R&D of provincial companies of outer circle. Secondly, successively established govern-enterprise company, terminal company, Internet of Things company, Migu company, Internet company (preparation), provided supports in systems and mechanisms, and impelled the companies to keep innovating in specialized fields. Thirdly, reinforced industry-university-research cooperation, and in combination with corporate development strategies, participated in major special scientific and technological researches of 4 countries; by relying on scientific research fund projects and united labs of the Ministry of Education, started 31 cooperative researches in fields including "cloud computing and big data", "mobile Internet" and "5G wireless communication"; entered into an innovation and strategic cooperation agreement with the China Academy of Telecommunication Research of the Ministry of Industry and Information Technology to make up deficiencies of capability or resources in respect of research of industrial policies, terminal network access detection and so on.

3. Promotion of "public entrepreneurship and innovation" by China Telecom

China Telecom officially started innovation incubation in March 2012, built innovation incubation platforms, and undertaken three missions of "fostering new business growth points, cultivating new

forces of mobile Internet and forming innovation culture" of the group. Specifically, such platforms include Tianyi Technology Venture Capital Co., Ltd. (TTVC), China Telecom Innovation Incubation (Shanghai) Base, China Telecom Innovation Incubation (Southern) Base and China Telecom Innovation Incubation (Beijing) Base under preparation. TTVC, as one of the earliest innovation incubation platforms of central enterprises, has been evaluated as a municipal-level scientific enterprise incubator in Shanghai. China Telecom Innovation Incubation (Shanghai) Base relies on TTVC, and is located at the China Telecom Information Park in Shanghai, with the total area of incubation environment reaching 10,000 m². China Telecom Innovation Incubation (Southern) Base, located in Guangzhou, records the total area of incubation environment of 1,200 m². China Telecom Innovation Incubation (Beijing) Base under preparation, located at the China Telecom Innovation environment of 1,200 m². China Telecom Innovation Incubation (Southern) Base, located in Guangzhou, records the total area of incubation environment of 1,200 m². China Telecom Innovation Incubation (Beijing) Base under preparation, located at the China Telecom Beijing Information Park, will establish an improved innovation incubation environment step by step.

The innovation incubation platforms of China Telecom are primarily engaged in venture capital and incubation services of strategic emerging industries such as the mobile Internet, Internet of Things, industrial Internet, cloud computing, e-commerce, etc., and are important strategic units for China Telecom to carry out strategic transformation and promote entrepreneurship and innovation. Through the incubation mode of "professional incubation + entrepreneurship mentors + angel investment", the innovation incubation platforms efficiently integrate and combine resources including the capital, network, technologies, talents and creativities of China Telecom and the social and technological innovation environment and capital, and actively supported the innovation and entrepreneurship of internal employees and social people of lofty ideals. At present, there are more than a hundred entrepreneurship mentors, who provide more than 30 professional trainings every year. Meanwhile, while keeping a foothold on resources and brand advantages of the capacity of central enterprise, China Telecom has introduced the equity and talent incentive mechanism of private enterprises, and has opened the participation channels of social capital, initiating the new mode of promotion of independent innovation and enterprise development under state-owned assets system.

The innovation incubation processes of China Telecom mainly include three phases: nursery cultivation, accelerated incubation and market-orientated operation. In the phase of nursery incubation, TTVC will provide project support funds amounting to RMB 50,000 ~ RMB 200,000 and incubation services, and help teams realize the transformation from creativity to mature products. In the phase of accelerated incubation within one year, preferential policies will be given for entrepreneur teams in using telecom network and marketing resources, and products will form a business scale at a fast pace and the capacity of comprehensive market-oriented operation. In the phase of market-orientated operation, entrepreneur teams operate independently in full, obtain the equity investment of TTVC, and may make settlements for various incubation services including telecom resources in a market-oriented way.

Additionally, the innovation incubation platforms of China Telecom connect social and industrial resources, establish a good cooperation ecosphere of innovation and entrepreneurship, and have successively established strategic cooperation relations with cyzone.cn, Amazon, Zero2IPO, Infinity, Fudan University Science Park and so on. In terms of introduction of resources, China Telecom has connected with the Bizspark entrepreneur plan of Microsoft and introduced cloud resources of Amazon and so on.

9.2.3 Internet entrepreneurship and employment of college students

1. Basic conditions

In China, the entrepreneurship of college students has been an important topic with social concerns. College students are the group with the most imagination and creativity, and are main forces of innovation and entrepreneurship. The quality, potential and capability, temperature, fever and height as well as quantity, quality and volume of innovation and entrepreneurship of college students reflect the fundamentals of innovation and entrepreneurship of a country.

In February 2015, the Ministry of Human Resources and Social Security issued the Circular on Well Doing the Work of Employment and Entrepreneurship of Graduates of Higher Educational Institutions in China in 2015, under which it is required to take the promotion of employment of graduates of higher educational institutions as top priority, carry out policies, elaborately implement the plan on promotion of employment of graduates of higher educational institutions who have left school but have not been employed yet, deeply implement the guidance plan of entrepreneurship of college students, intensify talent services for public employment, innovate in the publicity for employment of graduates. In May 2015, the General Office of the State Council issued the pinions of the State Council on Deepening the Innovation and Entrepreneurship Education Reform in Higher Educational Institutions, under which it is stressed to push forward the comprehensive reform of higher educational institutions, integrate innovation and entrepreneurship education into talent cultivation, and practically consolidate the sense of entrepreneurship, innovation spirits and creativity of students.

In October 2015, the first "Internet +" contest of innovation and entrepreneurship of students of China dropped the curtain. A total of 300 teams excelled from the preliminary contest at the school level and the semi-final contest at the provincial level got to the final. Eventually, among those 300 teams, 34

teams were awarded the Gold Medal, and 82 teams the Silver Medal. The contest started in May 2015. As at September 15, it attracted the application of 57,253 teams from 1,878 higher educational institutions in 31 provinces (municipalities directly under the Central Government and autonomous regions), with more than 200,000 students, collected 36,508 project works, and drove millions of college students to participate in innovation and entrepreneurship activities. In general, the contest closely combines a new generation of information technologies including the mobile Internet, cloud computing, big data and Internet of Things with industries, covered fields including the traditional industry of "Internet +", new business types, public services and technical support platforms, and presented the vitality and energy of innovation and entrepreneurship of contemporary college students.

On July 27, 2015, the China Association of Employment Promotion held the "Conclusion Conference of Statistics of Internet Entrepreneurship and Employment and Research of Internet Entrepreneurship and Employment of College Students and 'Internet +' Entrepreneur Seminar" in Beijing. This activity deeply discussed about policies and suggestions on establishing and improving relevant statistics systems, promoting the internet entrepreneurship and employment of college students, realizing steady and sound development and so on, and widely exchanged about the entrepreneurship and employment work under the background of "Internet +".

2. Total quantity of internet entrepreneurship and employment of college students

In 2014, the number of college students opening an online store in China exceeded 3 million, and the total employment scale was about 6.18 million people. In 2014, among individual online stores and enterprise ones in China, those established by college students accounted for 59.7% and 71.6% respectively. As calculated in that light, the total employment scale of internet entrepreneurship and employment of college students was about 6.18 million people, accounting for 60% of persons engaged in internet entrepreneurship and employment in China. In particular, online stores established by college students having not graduated yet drove the employment of about 300,000 people; those established by college students having graduated for 5 years or below drove the employment of about 2.31 million people; and, those established by college students having graduated for 6 years and above drove the employment of about 3.57 million people. (Refer to Figure 9-2). There were 3,118,000 online stores established by college students on the e-commerce platforms of Alibaba, with 5,566,000 people employed by such online stores in total. Meanwhile, according to the survey, students engaged in the internet entrepreneurship primarily established technology-intensive enterprises, and were good at applying new technologies such as the Internet, cloud computing, big data and intelligent terminal.



Figure 9-2 Distribution diagram of number of people employed by online stores established by college students

Source: China Association of Employment Promotion. Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students. 2015

3. Areal distribution of internet entrepreneurship and employment of college students

Most of the university and college graduates in China start their business in areas of developed economy and internet. Medium developed areas in Middle and West China, including Anhui, Guangxi, Hebei, Henan, Hubei, Hunan, Jiangxi, Inner Mongolia, Shanxi, Shaanxi, Sichuan, Yunnan and Chongqing; developed areas in West China and coastal regions, including Beijing, Fujian, Guangdong, Jiangsu, Shandong, Shanghai, Tianjin and Zhejiang; underdeveloped areas in Middle and West China, including Gansu, Guizhou, Ningxia, Qinghai, Tibet And Xinjiang; and medium developed areas in east and coastal areas, including Hainan, Heilongjiang, Jilin and Liaoning.

Most of the university and college graduates in China start their business in developed areas in East China and coastal regions and medium developed areas in Middle and west China. The areas in which the economy is mature or developed at a high speed can provide more new business opportunities and development points for entrepreneurship. However, the top provinces of internet entrepreneurship by college students are eastern coastal developed provinces, such as Guangdong, Zhejiang, Jiangsu,

Shandong, Shanghai, Beijing, Fujian, etc. The internet entrepreneurship in middle and west China still needs to be further developed. (See Table 9 7).

Internet entrepreneurship level	Cities of internet entrepreneurship and employment
Level 1	Guangdong, Zhejiang, Jiangsu, Shandong, Fujian, Shanghai, Beijing, etc.
Level 2	Jiangxi, Henan, Hubei, Hunan, Guangxi, Shanxi, Inner Mongolia, Jilin, Heilongjiang, Anhui, etc.
Level 3	Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang, etc.

Table 9 7 Distribution of internet entrepreneurship and employment of college students in China

Source: China Association of Employment Promotion. 2015 Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students

The percentage of college students is store 3.9% higher than the percentage of the non-college students in the internet entrepreneurs in Middle and West China. The percentages of college students who are founders of internet store in Middle China and West China are 13.5% and 7.3%, respectively, which are 2.5% and 1.4% higher than the percentages of non-college students in these two areas, respectively. The following table 9.8 set out the areal distribution of Ali e-commerce platform store owners.

	All		College	students	Non-college students	
Three major areas	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)
East China	5995	80.7	3572	79.2	2423	83.1
Middle China	928	12.5	608	13.5	320	11.0
West China	501	6.8	328	7.3	173	5.9
Total	7424	100.0	4508	100.0	2916	100.0

Table 9-8 Areal distribution of Ali e-commerce platform store owners

Source: China Association of Employment Promotion. 2015 Report on Statistics of Internet Entrepreneurship and Employment and on Research of Internet Entrepreneurship and Employment of College Students

9.2.4 Rural e-commerce entrepreneurship and employment

In July 2015, the Ministry of Finance and the Ministry of Commerce announced 2015 list of 200 counties for comprehensive demonstration of e-commerce, and the central government will allocate RMB2 billion to support the development of rural e-commerce. Support will focus on the e-commerce development of middle and west China, especially the old villages in old areas, and the funds will mainly be used for construction of level 3 logistics distribution system in counties, townships and villages. The areas in middle and west China account for 82.5% and the poor counties account for more than 43.5% of these 200 demonstration counties, of which each one can get the project start-up funds of RMB10 million.

In October 2014, Alibaba Group introduced a rural strategy focused on the "thousands of counties and villages" plan. Driven by Alibaba, e-commerce platforms such as Jingdong and Suning introduced their respective rural e-commerce plans, thus "facilitating the flows of e-commerce to rural areas" became a trend in 2015. By the end of December 2015, rural Taobao of Alibaba has covered 28 provinces and more than 250 counties and more than 10000 village-level rural Taobao service stations were built. "Rural Taobao partner and Taobangshou (assistant of rural Taobao partner)" launched by Alibaba Group, "rural agent" launched by Jingdong and the internal entrepreneurship plan launched by SF Express will drive hundreds of thousands of rural residents to join in the e-commerce entrepreneurship and employment.

There are 780 Taobao villages in China. Taobao village are developing at an extraordinary speed in China. In 2015, Taobao villages amounted to 780 in 2014, representing a year-on-year huge growth of 268% from 212 in 2014. These Taobao villages are widely spread over 17 provinces and cities. According to Ali Research Institute data, more than 1 million rural persons who are the main force of rural e-commerce entrepreneurs are active on Ali platform as at the end of 2015, and the local Taobao villages are becoming the aggregation and test field of "Xiaogang Village" rural e-commerce entrepreneurship in new era. On January 20, 2015, Wang Yang, the committee member of political bureau of the central committee of the Communist Party of China and the vice premier of the State

Council, accompanied by Ma Yun, the chairman of the board of directors of Alibaba Group, went to Bainiu Village, Lin'an, Zhejiang, a Taobao village grew depending on Chinese walnut, and encouraged more youngsters in big cities to go back home to start their business, like the e-commerce operators in Bainiu Village.

9.2.5Cross-border e-commerce entrepreneurship and employment

Since 2013, more and more entrepreneurs, such as Miya, Metao, Xiaohongshu, Birdex, Haimi, Jiemi, Yangcongtao and Bolo.me, have been being engaged in cross-border e-commerce. They focus on different things, for example, B2C cross-border purchasers such as Metao, Miya and Yangcongtao; C2C merchandisers such as Ymatou and Haimi; e-commerce player derived from community operator, such as Xiaohongshu; the e-commerce player from the logistics operator, such as Birdex and Jiemi; the e-commerce player from the live video operator, such as Bolo.me, etc. As e-commerce leaders and entrepreneurs stand on different customer flow bases, brand bases, capital strength and control over the supply chain, the access of leaders will have significant impact on the market the entrepreneurs have had. For entrepreneurs, it is important for them to find an appropriate market entry point and a sustainable business model in the symbiosis and competition environment to survive.

In spite of the fierce competition among the cross-border e-commerce market players, the leaders such as Taobao and JD.com are not the market monopolists, thus both of the leaders and the entrepreneurs have opportunities. If the early development of an industry relies on policy dividend, demographic dividend, low cost advantage and category width, while the cross-border e-commerce will eventually return to the competition point all the e-commerce players need to face - supply chain and service, which means they need to contact with the enough suppliers for bargaining power and pricing power; establish their inventories and have their own depth of inventories; own a controllable logistics channel, including the warehousing channel, the logistics channel and the technical system covering the purchasing, warehousing, customs clearance and others. For the above points, entrepreneurs should make their overall arrangement according to their business model, resource advantages and financial strength.

With the quick development of cross-border e-commerce in China, cross-border e-commerce enterprise often "find it hard to get a talent". At the 2016 economic and trade graduate supply and demand meeting in Hunan Province, 215 enterprises offered more than 6000 jobs for nearly thousands of graduates. The cross-border e-commerce, which involves English, business, marketing, logistics, customs clearance and many other sectors, needs compound talents. The short history and rapid development of cross-border e-commerce and the slow updating of higher educational institutions' talents cultivation program lead to the talent bottleneck in the cross-border e-commerce sector, therefore, some large cross-border e-commerce enterprises fail to find appropriate talents even several months later than the time when they begin to seek for such talents.

The kick-off meeting for 2015 China National College Students Cross-border E-commerce Innovation and Entrepreneurship Competition and World E-commerce Ecology Meeting was held at Beijing's Great Hall of the People on April 27, 2015. The said meeting ended successfully on November 14, 2015 in Tsinghua University, Beijing. During this competition, cross-border e-commerce enterprises with the participation of students had a total turnover of more than USD100 million; the maximum export by single enterprise during the competition had a turnover of USD1.5 million, and the maximum turnover in a month reached USD840,000; the team in which the students complete transactions by themselves independently and completely had a maximum turnover of USD90,000 in a month; nearly 500 students and 300 companies had preliminary intention of employment, accounting for nearly 20% of all the competition participants; and more than 200 students have a clear entrepreneurial intention, representing 7% of all the competition participants. The preliminary in-depth interaction between the education and the industry, and the collaborative win-win for the students and enterprises are achieved, for cultivation of the talents meeting the requirements of cross-border e-commerce.

In April 2016, cross-border alliance business base, a key cross-border-themed project in Xiamen free trade area and a new entrepreneurial innovation base oriented by cross-border demand with the industrial chain services, was launched in the cross-border e-commerce in Xiamen. Cross-border alliance business base not only provides policy guidance, financial support and tutorship and other services to entrepreneurs for their entrepreneurship, but also provides the lowest price to entrepreneurs, relying on the platform advantages of cross-border alliance, to improve the product competitiveness of entrepreneurs and enable these entrepreneurs to engage in cross-border e-commerce entrepreneurship without any restriction by threshold.

9.3 E-commerce entrepreneurship and employment environment in China

9.3.1 New mode of entrepreneurship financing incubation

By the end of 2015, there were nearly 3000 angel investment or venture capital institutions in China, which put more than RMB1 trillion under their management. The surges in the venture capital investment surges in China makes the venture capital investment a new spot of social investment and China a venture capital aggregation second to only America. A large number of innovative incubators, such as Innovation Works, Cheku Cafe, Microsoft accelerators, has emerged in Zhongguancun in recent years, which formed their own features in terms of operation mode, service object, service content, etc. Innovation works provide the incubation service for elite entrepreneurship; and Cheku Cafe serves as the aggregation plat form for grassroots entrepreneurs and entrepreneurship cooperation network, etc. With these innovative incubators, Zhongguancun sets up an high-end entrepreneurship elements agglomeration platform covering early investment, entrepreneurship training and entrepreneurship communication platform, promoting the quick integration of the innovative elements and forming a new boom of science and technology entrepreneurship in Zhongguancun. The government guiding fund was set up in 2001 to guide and energize the financial market by using the 'government guidance + civil participation + professional management" model. So far, 33 venture capital funds with the involvement of Zhongguancun have been set up and promised to invest RMB17.8 billion in total, achieving a method transformation from "blood transfusion" to "hemopoiesis", activating the financial market and the enterprise innovation. At present, there are over 30 active equity-based crowd-funding platforms in Zhongguancun, accounting for nearly thirty percent of domestic platforms. In Zhongquancun, "angel investment + partnership + equity-based crowd-funding" model has become the mainstream business model.

As a new breakthrough in Zhongguancun equity incentive, the tax does not need to be paid by the technician until the technician gains the equity dividends or transfers the equity incentive granted by enterprise, no matter how many years is it past the granting, in accordance with the Circular on Pilot Policies on the Individual Income Tax on Equity Reward in Zhongguancun National Innovation Demonstration Zone, in view of the circumstance in which the technician has to pay large sum of tax before the actual proceeds from the equity reward in practice. This measure can ease the practical issue arising from the large sum of tax payment by the technicians before they get the actual proceeds, is also advantageous to the enterprise innovation and constantly can accelerate the transformation of technical achievements. According to the data from Zhongguancun Management Committee, the enterprises above designated size in Zhongguancun earned a revenue of RMB2.52056 trillion in total from January 2015 to September, representing a year-on-year growth of 12.5%; and will earn a revenue of more than RMB4 trillion this year as estimated, representing a growth of about 15%. Chinese science and technology enterprises are leading the global scientific research and innovation, as driven by the "science and technology achievements transformation mechanism" in Zhongguancun.

9.3.2 Mobile entrepreneurship environment

The entrepreneurship under the guidance of "Public Entrepreneurship and Innovation" in 2015 has been the biggest entrepreneurship since the founding of new China, centered on cloud computing, big data and mobile Internet this time, are featured with "small", "ecological", "decentralized", "low threshold", "agile innovation", etc.

"Platform+" business model enable mobile entrepreneurs to build their own APPs, with the technical ability of open platform, so that they can stand out in market segment as long as they focus on the core business as few as possible; as entrepreneurship is business, the traditional e-commerce gradually becomes the entrepreneurial innovation infrastructure, and "side e-commerce" business model helps entrepreneurs to equip all the internet applications with abundant e-commerce resources, so as to get through business and make a breakthrough in the business development breakthrough; and the "data-intelligence-services" service mechanism for e-commerce is constructed, with the dynamic link between the "data chain" and "side e-commerce" and/or "open platform", and the adoption of intelligent recommendation of big data algorithm and real-time matching of supply and individual demand in the innovative operation. The said three driving forces are jointly creating the future mobile internet "public entrepreneurship and innovation ecosystem".

At present, the mobile Internet related entrepreneurship mainly concentrated in Beijing, Shanghai, Shenzhen, Hangzhou, Guangzhou and Chengdu, in which the entrepreneurial firms incubated account

for 81% of those in China, while the entrepreneurial firms incubated in Beijing, accounting for more than one third of those in China, are far more than the entrepreneurial firms in other cities (see figure 9-3).



■ Beijing ■Shanghai ■Shenzhen ■Hangzhou ■Guangzhou ■ Chengdu ■Nanjing ■ Xiamen ■Wuhan ■Suzhou∎Others

Figure 9-3 Distribution of entrepreneurial firms in key cities in China

Source: 2015 Ali Research Institute

The entrepreneurship is popular in Yangtze River delta region centered in Shanghai and Hangzhou as the center, and becomes more and more popular in Nanjing, Suzhou and other cities, thus it is inappropriate to underestimate the overall strength of the future "Silicon Valley" in China.

Beijing called the "Capital of Culture" benefits the good development of culture, sports, entertainment and education sectors; Shanghai called the "City of Finance" are advantageous in games and finance sectors; Shenzhen called the "Silicon Valley of Hardware" creates the best atmosphere for hardware innovation; Hangzhou called the "e-commerce paradise" has been incubating the e-commerce entrepreneurship for a long time; Guangzhou has more entrepreneurs of gams, culture and entertainment and social media; and Chengdu develops the innovation of games, animation and consumption. By virtue of features of respective sectors, the "public entrepreneurship and innovation" regions has brought together a group of entrepreneurs of different styles. ^(I) (See figures 9-4 and 9-5).



Figure 9-4 Features of entrepreneurship sectors in popular "public entrepreneurship and innovation" cities

Source: 2015 Ali Research Institute

^(a) Ali Research Institute. Research Report on "Mobile Internet+" Entrepreneurship Innovation Ecology in China [EB/OL] (2015-07-16) [2016-04-14]. http://www.aliresearch.com/blog/article/detail/id/20551.html.



Figure 9-5 Overall distribution of entrepreneur sectors

Source: 2015 Ali Research Institute

9.4 Development trend of e-commerce entrepreneurship and employment

9.4.1 Improvement of skilled e-commerce talent training to a new height

The academic education system should be improved. Higher vocational and technical colleges and application-oriented universities will assume more responsibilities for skilled E-commerce talent training. In 2015, Shanghai developed the Circular on Issuing the Planning of Shanghai Municipality on the Construction of the Modern Vocational Education System (2015-2030), which included the E-commerce major in the list of the second batch of the pilot professions of Shanghai Municipal higher educational institutions and application-oriented universities, reflecting the trend of the education reform. The Advance the "Innovation, Entrepreneurship and Maker" Action, and Accelerate Training the E-commerce Talents Adapted for the Requirements of "Internet Plus" released by the National E-commerce Vocational Education and Teaching Steering Committee will become the business guidance for the E-commerce talent training of all the higher educational institutions. In the future, all the provinces and cities will accelerate the reform of the E-commerce application-oriented talents and the building of the application-oriented professions, leading to the improvement in the training of students with such subdivided professions as E-commerce logistics, network customer service, networking marketing class, online shops (website) design, data analysis and online shop operation.

For strengthening the on-the-job training, the Ministry of Commerce will stick to the rural E-commerce training for the national E-commerce demonstration counties; and the Ministry of Human Resources and Social Security will continue to promote E-commerce practitioners to update their knowledge. Local governments will, in combination with public entrepreneurship and innovation, speed up the training of E-commerce innovation and entrepreneurship talents; and apply various resources to improve the E-commerce skills and marketing level of in-service staff of enterprises to promote the local E-commerce development at the same time. Besides, the social training institutions will innovate the training methods to improve the level and attraction of e-commerce business training by using the network media.

9.4.2Study and build the national e-commerce entrepreneurship and employment statistics system by relying on internet platform

The national employment statistics system shall cover the e-commerce entrepreneurship and employment, for standardized and normalized statistics and protection of innovation and entrepreneurship talents training, policy implementation and performance evaluation. In the following four aspects, it is advised to build and perfect the e-commerce entrepreneurship and employment statistics system in the first place, to cover the e-commerce entrepreneurs and employees by the

national employment statistics system; build and perfect the criteria, procedures and measures for identification of e-commerce entrepreneurship and employment in the second place, to further regulate and promote the e-commerce entrepreneurship and employment; build and perfect the real-name registration system of internet entrepreneurship and employment of college students in the third place, to facilitate the construction and perfection of regular callback system for tracking and understanding the employment and unemployment; and build a one package service platform covering the real-name registration - employment statistics - social insurance coverage - social insurance benefits - protection of rights and interests in respect of e-commerce entrepreneurship and employment statistics information system.

9.4.3 optimization of policy propagation and implementation channels, and strengthening of policy innovation and propagation

According to the employment characteristics, information acquisition habits and preference of ecommerce entrepreneurs and employees, the propagation of e-commerce entrepreneurship and employment policies shall combine the "red tape" and "network announcement" to highlight the key points of policies in a brief way in the form popularized among young people, to enable the beneficiaries of these policies to understand the policies, and make more network people to know the policies with the help of e-commerce website and other internet entrepreneurship and employment carriers, to enable the e-commerce entrepreneurs and employees to indeed benefit from the policies. Meanwhile, open up an e-commerce zone by relying on the entrepreneurship and employment information service platform, to release the information on supportive government policies on e-commerce, demand of enterprise for e-commerce talents, job hunting by e-commerce talents, success and failure of ecommerce enterprises on the internet, to facilitate the consulting and linkage by e-commerce entrepreneurs and strengthen the on-line and off-line interactions.

9.4.4Construction of "one-stop" service window for e-commerce entrepreneurship and employment

Provide the on-line services such as e-commerce entrepreneurship and employment training, application for reduction and exemption of tax e-commerce, application for loan and granting of entrepreneurial allowance, simplify examination and approval procedures, and solve the issues on archives, household registration and intra-province mobilization of social security of entrepreneurs.

As for the internet entrepreneurship by college students, provide the "one-stop" services such as the receipt of archives, transfer of registered permanent residence, regularization and level determination, title assessment and social security, to remove their anxiety.

9.4.5Exploration of mode of talents cultivation for seamless linkage between colleges and enterprises

When studying the theories, students majored in e-commerce shall pay attention to the practice of technology of basic application of e-commerce, business practice and professional technical practice of electronics. Encourage the exploration of joint cultivation mode of "colleges + society", and strengthen the construction of college and enterprise training base, for construction of "scenario" teaching mode. Characterize the majors and segment the disciplines of colleges for linkage of talents between colleges and enterprises. Meanwhile, the talents cultivation shall have the following features:

(1) The e-commerce talents shall be cultivated on the basis of network hardware. Understand general computers, servers, switches, routers and other networking equipment function, know about the performance of enterprise network products, such as cisco; know the routing protocol, TCP/IP protocol, etc.; be familiar with LAN network and can design, install, maintain and manage network.

(2) E-commerce talents should get the full grasp of the software platform implemented. For example, Microsoft's Windows (operation platform), server2003 (server operation system), SQLserver (database), commerce server and contentmanagementServer (e-commerce application), and ISAserver (safety guarantee).

(3) E-commerce talents shall have their own insight in the application, operation and management of e-commerce. And the insight in customer service, market, trade, logistics, distribution and other aspects are necessary as well.

9.4.6 Guide entrepreneurs in combining the "Internet Plus" with traditional sectors and services for the entrepreneurship and the entrepreneurship by returning to hometown

Encourage entrepreneurs to combine entrepreneurship with hot spots of profession, technology and application, to extend the entrepreneurship from "the Internet + retail " to science and technology, education, culture, logistics, finance, tourism, health care, intermediary and other service fields. Encourage entrepreneurs to return their hometowns to start the internet career, in combination with the current comprehensive demonstration of "access of e-commerce to rural areas" in China, to make them promote the rural circulation modernization and further promote the development of rural e-commerce, promote the "going-out of featured rural products" and "bringing-in of good products" to rural areas, and find new opportunities for entrepreneurship and employment in bringing the industrial products to and taking the rural products from the rural areas.

9.5 Local practices

9.5.1Efforts are put into promoting the internet entrepreneurship and employment of college students in Hangzhou

In recent years, the innovation-driven development strategy was implemented to an in-depth extent in Hangzhou, to pay attention to network entrepreneurship policies, innovate the network entrepreneurship training system, build the network entrepreneurship platform, optimize the entrepreneurship services, actively construct the network entrepreneurship service system with Hangzhou features for college students, and exploit the new "blue sea" for the entrepreneurship and employment of college students, bringing the significant result, on the basis of the deployment on construction of a "national e-commerce center" and by relying on the advantage of Hangzhou in e-commerce.

1. Strengthening of the guiding policies on the online entrepreneurship employment

Firstly, the market qualification recognition. The supportive policies on the internet entrepreneurship and employment and on-line entrepreneurship recognition standards are firstly introduced in Hangzhou, to encourage online stores to be registered with the administration for industry and commerce, and issue the Certificate of Recognition of Internet Entrepreneurship and Employment to those college students who do not meet the conditions for receipt of the business license, for recognition of their internet entrepreneurship and employment. The college students, who are the on-line entrepreneurs and are not registered with the administration for industry and commerce as asserted, may be entitled to the petty guaranteed loan, subsidies for individual search for jobs or self-employment, social insurance benefits, lump-sum reward for entrepreneurship, lump-sum unemployment insurance benefits, subsidies for entrepreneurship by persons having difficulty in employment and other supportive rewards, as the individual business is. Second, preferential treatment in terms of social security. The online entrepreneurs and employees may take the recognition certificate to be covered by the basic endowment insurance, medical insurance, work-related injury insurance, maternity insurance, unemployment insurance and others, as the urban individual worker. As driven by the favorable policies, the entrepreneurship by college students in Hangzhou remains good growth momentum in the context of slowdown of the economic growth. From January to May in 2015, the 598 large and new enterprises (including 148 e-commerce enterprises) were founded in Hangzhou, driving the employment of 2318 persons.

2. Innovation and improvement of online entrepreneurship training system

Firstly, the development of curriculum system and the formulation of technical standards. In 2012, Zhejiang University Press published the training material named "Make the Online Entrepreneurship Popular", as a result of mobilization of domestic first-class entrepreneurial training experts by Zhejiang University and Hangzhou Wotu Education and Technology Co., Ltd. In January 2015, the training material named Success in Internet Entrepreneurship was published. At the same time, the Technical Specification and Operation Manual on the Online Entrepreneurship Training Projects in Hangzhou was written as to the mobile e-commerce, cross-border e-commerce, social e-commerce, O2O, etc., to construct a complete technical standard system which integrates the theory teaching, simulated training, entrepreneurship practice and entrepreneurship support into an organic whole, and covers project content, training specification, quality monitoring, assessment and management. Secondly, carry out the teacher training, and promote the project implementation. In order to ensure the training the smooth progress of internet entrepreneurship training project, 4 internet entrepreneurship trainer

programs have trained more than 130 trainers. Meanwhile, the online entrepreneurship training projects shall be subsidized for RMB1200 for one time as the entrepreneurship training, as long as the conditions for receiving subsidies for entrepreneurship training are met. On this basis, 14 online entrepreneurship training organizations including Zhejiang University are recognized, leading to the formation of a new cooperation mode featured with the guidance by government, directorship by higher educational institutions, participation of enterprises and operation of institutions.

3. Positive construction of internet entrepreneurship and employment platform

Focus shall be put on the construction of "one contest in one park". Firstly, built the internet entrepreneurship park of public welfare. In 2013, the internet entrepreneurship space was built by ecommerce enterprises including Taobao, led by Hangzhou Employment Bureau, for construction of the internet entrepreneurship incubation demonstration base. Hangzhou was rated "2013 Local Employment Innovation Event in China" by the Ministry of Human Resources and Social Security of the People's Republic of China. It won the honored title of "Top 10 Ideal E-commerce Parks" in the "Election of E-Commerce Parks in China" jointly held by Taobao and Iwshang in 2014. By the end of 2014, there were 66 accumulated incubation merchants in Hangzhou, comprising 4 merchants out of parks after successful incubation, and 20 registered companies, with registered capital of RMB2 million in total. Secondly, hold online entrepreneurship competitions. The first "Wotu Cup" online entrepreneurship contest was held for the college students in 2013, which is the first special contest of online entrepreneurship by college students, attracted 396 teams to participate in it. In December 2014, "Wotu Cup" entrepreneurship contest for the college students in Hangzhou (special contest for crossborder e-commerce practicers) was successfully held, in which the winner team could not only move into Hangzhou Wangshang Innovation Park with rents exempted for two years, but also recommended to apply for Hangzhou prominent entrepreneurial talent development plan.

4. Focus on optimization of public services for online entrepreneurship

Government behavior optimization can simplify the service process as much as possible, to facilitate the entrepreneurship and employment of college students as much as possible. Hangzhou human and social security department works with the economic and information commission, statistics department, industrial and commercial department and others to carry out statistics of internet entrepreneurship and employment of college students, for strengthening the management over the real-name registration of internet entrepreneurship by college students and getting hold of the recognition of internet entrepreneurship and employment, gender, age, knowledge and skill, sectors and profession, social security and other information. The talent service and employment service institutions at all levels in Hangzhou actively provide "one-stop" services for the internet entrepreneurship by college students, such as talents recruitment, personnel agency and policy consulting.

9.5.2Explosive growth in maker space in Shanghai

By the end of November 2015, there were about more than 450 maker space in Shanghai, representing an explosive growth from about 200 maker spaces in 2014, and the incubators grew by nearly 30%. On one side, Shanghai science and technology entrepreneurship center is cooperative in cancelling the recognition of incubator of science and technology enterprise at the city level and replace the said recognition with the filing with the incubation association; on the other hand, the entrepreneurship service organizations are guided in setting up Shanghai Maker Space Alliance. In 2015 the maker space in Shanghai set up the angel investment funds of RMB1.675 billion, which invest nearly 700 enterprises, involving 2 leading enterprises listed on National Equities Exchange and Quotations.

The science and technology loan relieves certain financial pressure of enterprises, needs no mortgage and can be issued quickly. In 2015, the science and technology loans in Shanghai amounted to RMB1.353 billion, representing a year-on-year growth of 15.28%, and the overdue loan ratio of 1.37% is far below the industry average. In 2016, the equity financing service and restructuring service for listing were provided to science and technology loan customers, and 15 enterprises have found their investing institutions so far. In addition to the science and technology loans, the entrepreneurship insurance will be explored this year to strive to try out in the science and technology enterprise incubators and provide security for and support to entrepreneurs. So far, some insurance company has expressed the intention of development of market-oriented entrepreneurship insurance, and the Interim Measures on Administration of Risk Compensation for Angel Investment in Shanghai came into force on February 1.

In 2015, 3000 newly established enterprises and teams participated in the competition named "entrepreneurship in Shanghai", of which the size was three times of the previous one. In view of great entrepreneurial passion, innovation funds, science and technology giant project, entrepreneurship nursery project and other policy resources will be matched with innovation and entrepreneurship contest in 2016, for exploration of effective channel for injection of market "gene" into the government resource allocation and promotion of early policy support to high-quality enterprises or projects.