



Inclusive Growth and E-commerce: China's Experience

Foreword I



It is the worst of times; it is the best of times. On the one hand, the world economy is struggling to recover its precrisis dynamism, while growth has become even more uneven. On the other hand, e-commerce, a new business model built on digital technology, is growing exponentially and expanding the territory of the new economy. Whether e-commerce can contribute to inclusive growth is the question policy makers want an answer to.

This publication from AliResearch reviews the development of e-commerce in China and by studying its economic impacts attempts to provide an answer. E-commerce has become a pillar of China's economy. In 2016, e-commerce sales reached RMB 5.2 trillion (about USD 750 billion in today's exchange rates), accounting for 15.5% of national retail sales. Of the 10.4 percent retail sales growth in 2016, e-commerce sales of physical goods contributed 3 percentage points. In addition, e-commerce has created new business norms and transformed the nation's economic landscape.

China's experience in the past decade has proven that e-commerce-driven growth can be inclusive. First, e-commerce empowers micro, small and medium enterprises (MSMEs) to compete with large enterprises on the same stage. MSMEs can leverage affordable digital platform services, which used to be too expensive for them to establish, to build brand awareness, acquire and manage customers, and spur innovation. Second, e-commerce knows no geographic boundaries. Remote rural residents can purchase the same goods at the same price on the same platform as urban residents. Finally, e-commerce allows more flexible and inclusive employment.

China's experience holds useful lessons for much of the developing world. It suggests that developing countries too, given the right policies and investment in infrastructure, could use e-commerce to grow in a way that benefits those who might have been sidelined by traditional technologies - MSMEs, the rural population, the handicapped, and women. While national actions are fundamental to drive e-commerce development forward, the international trade and investment environment is important too particularly given how much growth is occurring in cross-border e-commerce. Digital technologies are making a borderless world possible with all the potential to make growth more inclusive. But if trade restrictions make it costly for goods to cross borders, then this borderless world will not come into being. If cumbersome trade procedures slow down the movement of goods across borders, then the one-click ordering feature of e-commerce platforms matters less.

The WTO is responsible for designing the global rules that govern international trade and so can play a pivotal role in facilitating further expansion of cross-border e-commerce and therefore of inclusive growth. The bulk of global trade rules were laid down in the last century. It is important to remember that WTO rules are being updated starting with the Trade Facilitation Agreement (TFA) that came into force in early 2017. However, a number of WTO members, both developed and developing countries, realize more needs to be done. They have therefore been active in initiating discussions and information exchange with other members to see how the WTO could do more. I believe that the facts and analysis contained in this study by AliResearch could contribute a lot to those discussions in Geneva and wish to thank the authors for the insights they have provided.

Diaorhun Yi

Xiaozhun Yi WTO Deputy Director-General

Foreword II



Jack Ma very aptly said "E-Commerce is no longer the dessert it has become the main course", this reality has motivated Pakistan and like-minded countries in WTO to float the "Friends of E-commerce for Development" Group. This e-commerce and inclusive growth case-study of China is very timely in an age where rapid technological change and increased penetration of ICT have disrupted the traditional ways of conducting business and e-commerce has become a critical feature of international trade. Apart from reducing the trade costs associated with physical distance, e-commerce has increased the trade opportunities available to MSMEs by enabling them to access the global marketplace and participate in international trade. However, serious challenges remain in terms of poor infrastructure, inadequate logistics, low adoption of ICT and lagging legal and regulatory frameworks which hinders e-commerce and ultimately, growth and development.

Pakistan has been a vocal supporter of the "Friends of E-commerce for Development" group because we are of the view that the benefits and economic growth from e-commerce/digital trade should be equitably distributed. At a global level, we should strive to be inclusive and non-discriminatory in our approach and believe that this constitutes increasing transparency in regulatory disciplines; accounting for the developmental dimension of e-trade; sharing best business practices with the members who do not have adequate technical skills; and suggesting initiatives for capacity building etc. The ultimate goals are to help under-developed communities or MSMEs access global value chains and global markets, increase competitiveness in goods and services, promote innovation, increase consumer choice and decrease unemployment.

This report is an excellent illustration of how e-commerce can be a crucial pillar for inclusive economic growth. It is instructive to read the efforts undertaken by the government and private sector in China to promote MSMEs and rural development, and inclusive employment. The focus on broadening access to finance, logistics and technological advancements to disadvantaged players in the local market can provide much-needed synergies on a national level and provide an excellent path for future growth and development in developing countries. This report's incisive focus on social welfare is highly appreciated and we think that its recommendations would prove highly effective for many other developing countries looking to turn e-commerce into an engine of growth and shared prosperity for the future.

1. Tung is

H.E. Syed Tauqir Shah Ambassador of Pakistan to the WTO

Foreword III



The new development model of inclusive growth has emerged in the 21st century due to the new technology clusters, such as internet, IoT, big data, cloud computing and artificial intelligence, as well as e-commerce and other new business models. As a result, economic growth has benefited more countries and population, particularly disadvantaged groups, developing countries and regions.

E-commerce and inclusive growth have achieved huge success in China. E-commerce has become the cornerstone of the economy instead of a supplement. It has greatly reduced information cost, built an open and transparent market environment, deeply integrated with traditional sectors and successfully transformed the nation's economic landscape. Meanwhile, the growth benefits have not been only distributed among big players. From cities to villages, from manufacturing to service sectors, SMEs have a level playing field to compete with large companies and become the new growth engine of the economy.

Alibaba Group is committed to "making it easy to do business anywhere" and to empowering global SMEs and consumers. By providing new business infrastructure for the internet era – from e-commerce platforms, inclusive finance and smart logistics to big data, cloud computing and cross-border trade services – the Group is helping SMEs to better "source globally, sell globally" and to explore more innovative development.

Since 2016, Alibaba has been calling for the establishment of an Electronic World Trade Platform (eWTP) to accommodate the rapid development of the global digital economy, provide greater support to the development of SMEs and young people, incubate new international e-trade rules and promote the growth of inclusive trade worldwide. In September 2016, as one of the major policy recommendations of the Business 20, the eWTP was echoed by the Group of 20 Leaders and included in the official communiqué of the G20 summit in Hangzhou. On March 22, 2017, the first overseas e-hub for the eWTP was confirmed to be born in Malaysia. The digital free-trade zones will be the integrated hub for logistics, payment, custom clearance and data. It will also serve as the infrastructure for digital economy development and the gate of Malaysian and other Southeast Asian SMEs to the world.

Imbalanced growth has been the global challenge. China's experience in e-commerce and inclusive growth is replicable. We hope the cases in this report can provide a good reference for other developing countries.

Hongbing Gao

3 52-N-

Vice President of Alibaba Group and Director of AliResearch

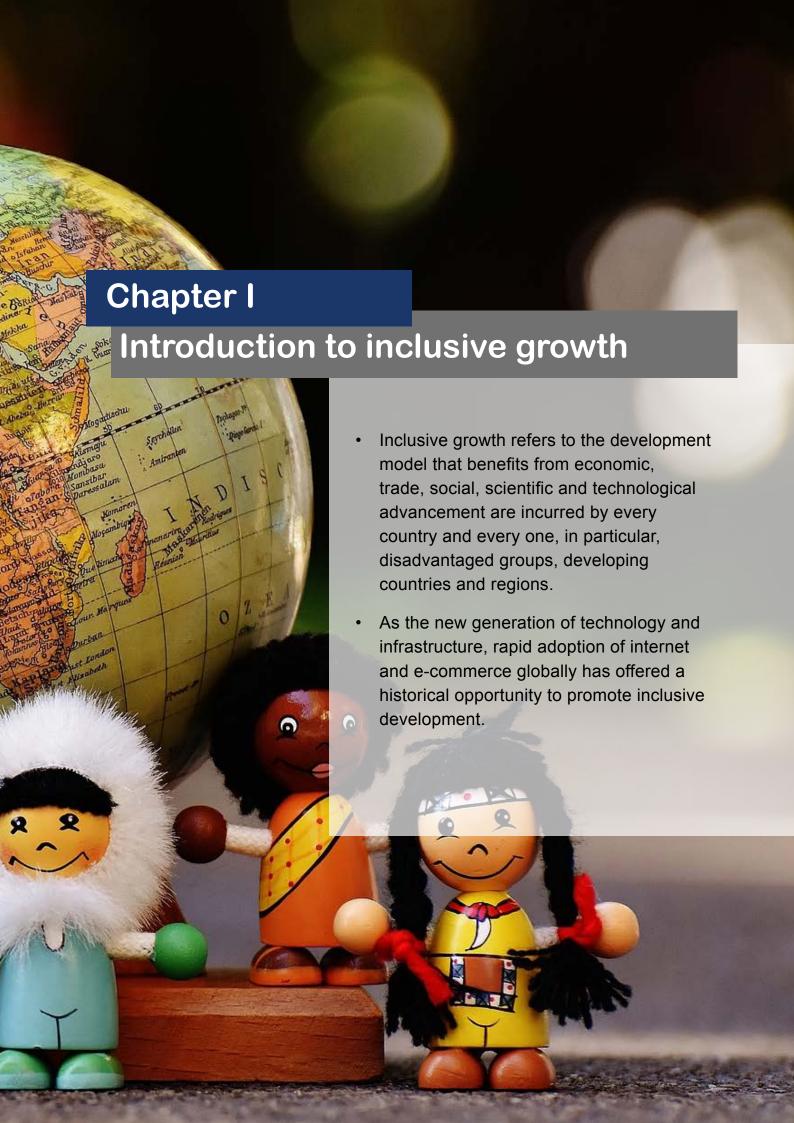




Contents

Chapter I: Introduction to inclusive growth	10
Chapter II:	
Inclusive impacts of e-commerce on China's economy and trade	14
Section 1 Overview of e-commerce development in China	14
Section 2 Inclusive cross-border e-commerce	17
Section 3 Inclusive finance	21
Section 4 Inclusive logistics	24
Section 5 Inclusive technological advancement	28
Chapter III:	
Inclusive impacts of e-commerce on China's economic and social welfare	32
Section 1 Promote SME development	32
Section 2 Promote rural development	
Section 3 Promote inclusive employment	43
Chapter IV: Conclusion	48
Authors and Acknowledgements	50







Chapter I Introduction to inclusive growth

Global economy has been migrating from industrial to information age. As the new generation of technology and infrastructure, rapid adoption of internet and e-commerce globally has offered a historical opportunity to promote inclusive development and an effective approach to fulfill UN's 2015-2030 sustainable development goal.

Inclusive growth refers to the development model that benefits from economic, trade, social, scientific and technological advancement are incurred by every country and every one, in particular, disadvantaged groups, developing countries and regions. The core of inclusive growth is to effectively provide equitable development opportunities for every section of society.

The substantial progress in new technology and new business models since 2000s, such as internet, internet of things, big data, cloud computing, e-commerce and artificial intelligence, has laid down solid foundation for realizing the full potential of inclusive growth.

The substantial progress in new technology and new business models has laid down solid foundation for realizing the full potential of inclusive growth.

I. Development of internet technology

Advancement of internet technology and its widespread deployment in business have significantly improved products & services innovation and trade efficiency. People across the world are now connected by internet with seamlessly and simultaneously matched demand and supply, which does not require presence at the same physical place (e.g. market, bazaar and exhibition) or intermediary (e.g. mail and distributors of international trade) as in the past. Internet technology and platform enable sharing information infrastructure. As a result, information cost reduces significantly and demand & supply are more easily matched, thus creating more business opportunities. Sharing contributes to more equitable and efficient resource allocation and further empowers SMEs.

II. E-commerce platform empowers inclusive growth

The emergence of e-commerce platform has paved the way for inclusive trade and economic development. To a certain extent, internet platform has fostered inclusive trade. Internet platform's technical services, standardized processes and business rules are the most influential innovations in international trade.

We believe that international trade system will anchor on e-commerce platform in the internet age. The platform has five major functions, that is, information matching, transaction, payment, logistics and comprehensive services. E-commerce platform substantially reduces communication cost. Besides, the rating/review and credit systems further enhance transactions' credibility thus attracting more and more buyer/ sellers to participate.

III. Evolution of consumer goods trade

The pace of product innovation and iteration speeds up due to science & technology

advancement and mass media promotion. With the rise of sizable middle class segment in developing countries, two distinct consumer trends emerge, that is, value-for-money and customization. Cross-border e-commerce has caused fragmented, frequent, small-quantity and highly diversified import and export. Equipped with e-commerce platform and other infrastructure facilities such as payment and logistics, cross-border e-commerce has experienced explosive growth, which creates direct access to international markets and global value chain for SMEs.

IV. Advancement of trade facilitation

Digital trade documents, a single window or entry point to participating authorities or agencies, and other trade facilitation measures, promoted by UN, WTO and many governments, are helpful for developing countries and SMEs to participate in international trade. The validation of WTO Agreement on Trade Facilitation in February 2017 will sharply improve transparency and efficiency of cross-border trades and thus help SMEs to participate into global value chain. The global trade cost is expected to reduce by as much as 14.3% if the agreement is implemented thoroughly. It will also benefit global inclusive growth.

The global trade cost is expected to reduce by as much as 14.3% if the trade facilitation agreement is implemented thoroughly.







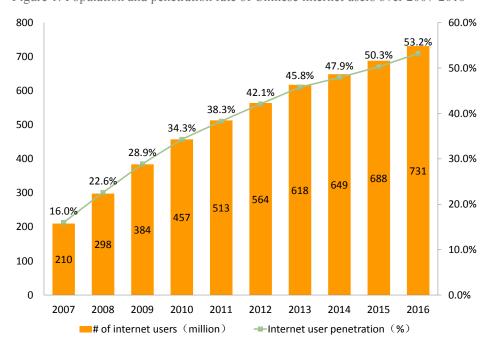
Chapter II Inclusive impacts of e-commerce on China's economy and trade

Section 1 Overview of e-commerce development in China

I. Population of internet users

As of December 2016, the population of Chinese internet users reached 731 million, accounting for 53.2% of national population. The number was largely equivalent to the population of Europe. The internet penetration rate was 3.1 percent above global average and 7.6 percent above Asian average.

Figure 1: Population and penetration rate of Chinese internet users over 2007-2016



Source: China National Bureau of Statistics

II. Population of mobile internet users

As of December 2016, the population of Chinese mobile internet users reached 695 million, increasing by 75.50 million from the previous year. The mobile internet users accounted for 95.1% of total internet users, 5 percent higher than the previous year.

China's internet penetration rate was 3.1 percent above global average and 7.6 percent above Asian average in 2016.

The mobile internet users accounted for 95.1% of total internet users, 5 percent higher than the previous year.

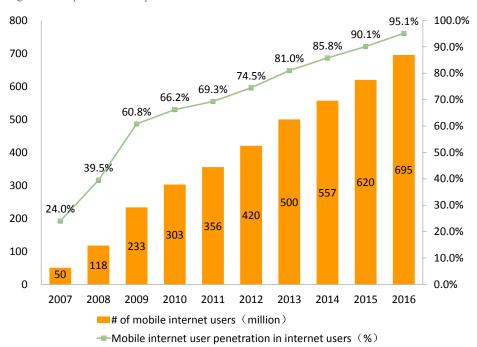


Figure 2: Population and penetration rate of Chinese mobile internet users over 2007-2016

Source: China National Bureau of Statistics

III. Market size of e-commerce

As of December 2016, 467 million consumers shopped on-line, increasing by 12.9% year-on-year and accounting for 63.8% of internet population. 441 million consumers shopped though mobile phones, rising by 29.8% year-on-year and contributing 63.4% of mobile internet users.

In 2016, China's e-commerce sales was RMB 5.2 trillion, with year-on-year growth of 26.2% which more than doubled the growth rate of total retail sales.

467 million consumers shopped on-line, increasing by 12.9% year-on-year and accounting for 63.8% of internet population in 2016.



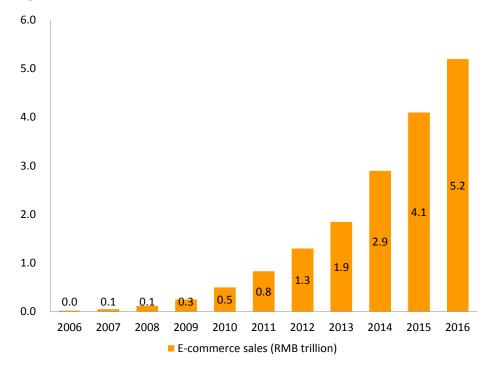


Figure 3: China's e-commerce sales over 2006-2016

Source: China National Bureau of Statistics

IV. Market size of online payment

As of December 2016, China's mobile online payment users rose to 469 million, with annual growth rate of 31.2%. The mobile online payment penetration rate increased to 67.5% from 57.7%. Mobile payment rapidly spread to off-line. 50.3% of internet users paid by mobile phones when shopping in physical stores.

As of December 2016, China's mobile online payment users rose to 469 million, with annual growth rate of 31.2%.

Section 2 Inclusive cross-border e-commerce

I. Trends of inclusive trade development

The emergence of internet and cross-border e-commerce platform has lowered international trade barriers. There are significant changes in international trade participants, goods and structure. Both create favorable conditions for inclusive trade development.

(1) Change in participants

Cross-border e-commerce platform provides equitable opportunities for MSMEs (Micro, Small and Medium Enterprises) and individuals to participate in international trade. With the role of MSMEs and individuals gradually strengthening, international trade landscape is becoming more diversified and active. China accommodates nearly 40 million MSMEs, of which 5 million engage in international trade and contribute approximately 60% of China's total export and import volume.

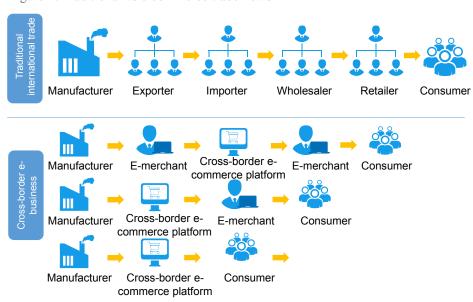
(2) Change in goods

Traditional international trade is in large volume and delivered through container shipment. Internet has improved information exchange efficiency among trade participants. Considering inventory cost and dynamic consumer demands, the new trend is to order in small quantity and with high frequency.

(3) Change in formats

Inclusive trade significantly weakens the role of intermediaries. The distance between consumers and producers shortens. Under some special circumstances, producers directly reach consumers, collecting feedbacks and improving its production, design, innovation, etc.

Figure 4: Traditional vs e-commerce trade flows



Source: AliResearch

There are significant changes in international trade participants, goods and structure.

China accommodates nearly 40 million MSMEs, of which 5 million engage in international trade and contribute approximately 60% of China's total export and import volume.

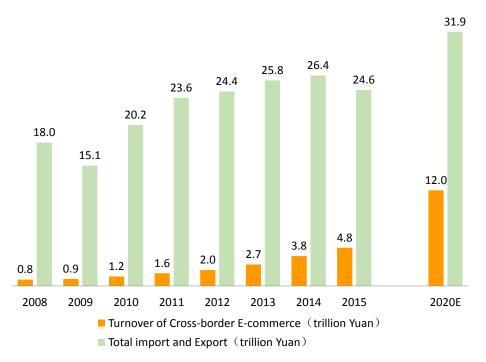


In 2015, China's crossborder e-commerce volume rose to RMB 4.8 trillion, with yearon-year growth of 28%. The number is expected to reach RMB 12 trillion by 2020 with the compound annual growth of 20.1%.

II. Overview of cross-border e-commerce development in China

Cross-border e-commerce is built on a free, open, universal and inclusive global trade platform, where billions of consumers and MSMEs are directly linked across the globe and, to a certain extent, the vision of global connection and interaction is fulfilled. In 2015, global trade growth was stagnant while cross-border e-commerce in China beat the market with ascending penetration rates in both import and export. In 2015, China's cross-border e-commerce volume rose to RMB 4.8 trillion, with year-on-year growth of 28%. The number is expected to reach RMB 12 trillion by 2020 with the compound annual growth of 20.1%.

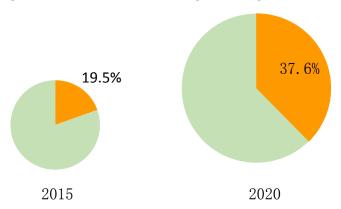
Figure 5: China's cross-border e-commerce and total international trade volume



Source: Ministry of Commerce, General Administration of Customs, iResearch, AliResearch

In 2015, the proportion of cross-border e-commerce in total export-import volume in China was 19.5%, and is expected to climb to 37.6% by 2020.

Figure 6: Proportion of e-commerce in total import and export volume in China



Source: Ministry of Commerce, General Administration of Customs, iResearch, AliResearch

Case 1: Aliexpress - order wherever with internet access

Cross-border e-commerce empowers small businesses to engage in globalization in the age of big data.

In 2015 Singles' Day Shopping Festival, consumers from 214 countries and regions placed orders on Aliexpress; then 21.24 million parcels were sent to the world within 24 hours, including:

- 155 orders from Greenland, the most northern island of the earth;
- 415,479 orders from Chile, the most southern country of the earth;
- 608 orders from Fiji, where 180° meridian runs through;
- 356 orders from Seychelles, an island country on the Indian Ocean;
- 30 orders from Lesotho, a country in southern Africa with the world's highest average elevation;
- 15 orders from Vatican, the smallest country in the world;
- 18 orders from chaotic Syria.

Case 2: "One Touch" - equip small businesses with professional services

"One Touch" is Alibaba's one-stop service platform for SMEs in China, offering custom clearing, foreign exchange settlement, tax rebate, logistics and finance services. It is also an integrated platform that connects government departments and agencies, financial institutions and logistics services.

- From 2010 to 2015, volume of "One Touch" grew nearly 100% p.a., and it has become the largest export service platform in China.
- Amount of exports was up to USD 22.5 billion in 2016, 87.5% higher than that
 of 2015, indicating SMEs' demand for integrated export services with lower cost
 and higher efficiency.



III. Evolution of cross-border e-commerce policies in China

Cross-border e-commerce, as China's new engine for economic growth, a prototype for new industrial transformation and a pilot for further opening-up, has gained traction in recent years. China established the comprehensive pilot zone for cross-border e-commerce in the past years and constantly improved policies, supervision systems and developed services' ecosystem. China has now established systematic and comprehensive supervision system for e-commerce retail import, which provides favorable policy conditions for cross-border e-commerce in China.

Case 3: Bonded model of cross-border e-commerce retail import

In July 2014, General Administration of Customs of China created a new customs supervision code "1210" for "Bonded Cross-border E-commerce", which laid down the policy foundation for the bonded model of cross-border e-commerce retail import. It is a major innovation born in China for cross-border e-commerce supervision practice.

Processes of bonded model of cross-border e-commerce retail import: merchants of cross-border e-commerce platform transport goods to a domestic bonded zone through international logistics; submit relevant documents to the customs and CIQ and store the goods in bonded warehouses; when a consumer places an order, the merchant will submit the order, freight bill and payment information to the customs, and then the goods will be delivered to the consumer through domestic logistics after customs' inspection and release.

Advantages of the bonded model:

- Efficiency: reduce layers of intermediaries, purchase costs and international logistics costs.
- Supervision: combine small-quantity orders from individuals into a big one and then deliver the combined orders to the country's supervision area. Information and data are collected from combined document of order, shipment and payment. Land security and quarantine inspection are also insured.
- Consumer experience: save delivery time and improve consumer experience.

Section 3 Inclusive finance

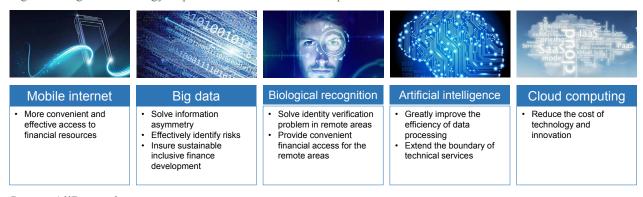
I. Digital technology is the globally accepted approach for inclusive growth of financial services

Inclusive financial system was defined by UN in 2005 as the system that may provide every section in society with effective and comprehensive financial services. Inclusive finance has made progress but is still encountered with various challenges. The greatest one is to balance promoting inclusiveness and fulfilling responsibility of being profitable as a business organization.

Along with rapid development of digital technology, digital inclusive finance has become the globally accepted approach for inclusive growth of financial services. Digital technology contributes to cost reduction, efficiency improvement, new business development, experience enhancement as well as provides equitable access for all to convenient, safe and creditable financial services.

Specifically, mobile internet technology creates convenient and effective touch points with large consumer base under low-cost budget. Big data largely solves the problem of asymmetric information in financial services, identifies and manages risks in a systematic and effective manner and thus ensures sustainable development. Biological recognition solves the problem of long-distance identity authentication, particularly providing financial services in remote regions. Artificial intelligence technology improves big data processing efficiency, iterates and upgrades fast through deep learning and simulates human thinking, which all expand territories of financial services. Cloud computing tremendously reduces operation and innovation costs for financial services with low-cost and highly-scalable cluster computing.

Figure 7: Digital technology improves financial services' experience



Source: AliResearch

II. Principle and practice of digital inclusive finance in China

Ant Financial, affiliated to Alibaba, targets to build the completely new digital-technology-driven and credit-system-based financial ecosystem in order to provide inclusive financial services for the world where all consumers and producers have equitable opportunities in future development.

Take 2016 Singles' Day Shopping Festival as an example. Digital inclusive finance has deeply penetrated in consumers' and producers' activities. It is actually the inclusive, inexpensive and secure version of financial services.





Figure 8: Role of digital inclusive finance in Singles' Day Shopping Festival

Source: AliResearch

(1) Make payment more convenient

Alipay, an APP for shopping payment and fund transfer, has more than 450 million users with identity verification. The cloud-computing-based infrastructure enables to process ultra-high-volume payment requests without sacrificing transaction reliability and user experience. In 2016 Singles' Day Shopping Festival, the peak processing capacity was 120 thousand transactions per second.

(2) Reduce financing costs for micro and small businesses

MYbank, Alibaba-affiliated internet bank, provides "310" loan service (3-minute application, 1-second approval & grant and 0 manual intervention) for micro and small businesses. 4 million such businesses received the loans with total amount of RMB 700 billion with average per-account outstanding loan of less than RMB 30,000, which provides financial support for entrepreneurship and innovation development.

(3) Extend wealth management channels for ordinary families

Yu'E Bao is a money market mutual fund with the minimum investment amount of RMB 1, which can be purchased and redeemed on the same day. It has served more than 200 million users, including 100 million rural users, and generated return of RMB 60 billion for the users. It is worth noting that Yu'E Bao has become a commonly-used wealth management tool for low-income households and junior white collars. Its key characteristics of low entry requirement, low risk, high liquidity and shopping-oriented function design explain its prevalence.

(4) Supplement traditional credit reference system

Only 0.3 billion out of 1.4 billion Chinese people have credit records, which constrains the development of inclusive finance. Zhima Credit has developed a reliable big-data-based credit reference system. At present, Zhima Credit has covered nearly 100 million clients who have no or very limited loan history, which enables low-mid-income households, particularly rural residents, to have relatively easy

"310" loan service 3-minute application,
1-second approval &
grant and 0 manual
intervention for micro
and small businesses. 4
million such businesses
received the loans
with total amount of
RMB 700 billion with
average per-account
outstanding loan of less
than RMB 30,000.

access to loan services. Zhima Credit also helps financial institutions to reduce non-performance loan rate and enhance the ability to fight against frauds. Zhima Credit is also widely used in everyday life such as car and house rental, which saves time for users and improves society's efficiency.

(5) Promote insurance services

Ant Financial closely cooperates with insurance companies, sharing its capacities in scene, data, operation and technology, to satisfy users' fragmented needs in shopping, travelling and payment. In Singles' Day Shopping Festival in 2016, 600 million return shipping insurances were sold, which became the most deeply penetrated insurance product in China. In addition, various types of insurance products tailored for fragmented needs substantially increased the penetration of insurance. For the first time, insurance has become a conventional need of consumers.

In Singles' Day
Shopping Festival in
2016, 600 million return
shipping insurances
were sold, which
became the most
deeply penetrated
insurance product in
China.





14 billion pieces of express delivery were completed in 2014, surpassing the United States for the first time and ranking the first in the world.

Section 4 Inclusive logistics

I. Rapid development of express delivery market in China

According to the State Post Bureau of China, 14 billion pieces of express delivery were completed in 2014, surpassing the United States for the first time and ranking the first in the world. The figure rose to 20.7 billion and 31.3 billion in 2015 and 2016 respectively and continues to grow by 50% p.a.. Given China's population of 1.4 billion, each person sent/received over 22 parcels on average in 2016; excluding those without internet access, the number was approximately 45, that is, one sent/received one parcel each week. Express delivery has been an integral part of Chinese people's daily life. Door-to-door delivery service is inexpensive and has become the common practice for Chinese consumers. The new consumption habits have changed the logistic service model.



Figure 9: Volume and price of China's express delivery over 2005-2016

Source: China National Bureau of Statistics, AliResearch

E-commerce is the major driver for the explosive growth of China's express delivery market. 70% of express delivery parcels originate from e-commerce. According to AliResearch, the average distance between buyers and sellers of the Alibaba platform is approximately 1,000 kilometers, which creates huge demand for express delivery.

II. Wide coverage of express delivery in China

Within 20 years, express delivery has become an inclusive service, which covers nearly 3,000 counties as well as rural area. To a certain extent, expressive delivery has narrowed the gap between urban and rural China. Rural residents now have the same shopping right as in cities. 70% of 2+ million express delivery men come from rural area. Migrant workers from rural area are no longer bounded in manufacturing and construction sectors and shift to more open logistics services, which helps them to integrate into cities.

Case 4: Rural Taobao

Rural Taobao is Alibaba Group's strategic initiative. In order to serve farmers, innovate agriculture and transform rural area, Alibaba plans to invest RMB 10 billion to establish 1,000 county service centers and 100,000 village service centers within three to five years.

Based on the e-commerce platform, Alibaba will closely cooperate with local governments to establish the two-layer service networks (county and village), break logistics and information bottlenecks, and finally smooth two-way flows – online purchase of urban-made goods and on-line sales of rural-made agricultural products. In rural China, goods are delivered in two steps: first, express companies take orders and transport goods to county-level Cainiao service centers; second, local logistics companies and postal services transport goods from county-level service centers to village-level service centers. By now, Cainiao has set up more than 500 county service centers and over 30,000 village service centers.





In the land area of 9.6 million square kilometers, the average transportation time of express delivery is less than 60 hours and the average transportation distance is approximately 1,000 kilometers.

III. Significant improvement of logistics efficiency

In the land area of 9.6 million square kilometers, the average transportation time of express delivery is less than 60 hours and the average transportation distance is approximately 1,000 kilometers. Cainiao targets to shorten the figure to 200-500 kilometers through warehouse and dispatch optimization. Leveraging data integration and cross-business coordination, logistics efficiency significantly improves. Take 2016 Singles' Day Shopping Festival as an example. Logistics efficiency increased by 10-15%; the peak of completed delivery volume occurred on the 14th day after the festival, compared with the 16th day in 2015 and the 17th day in 2014.

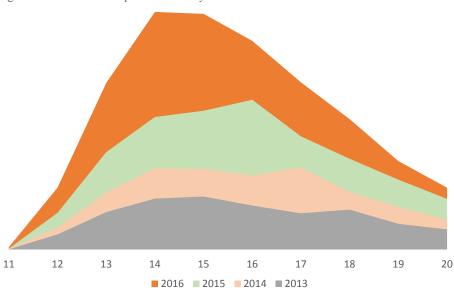
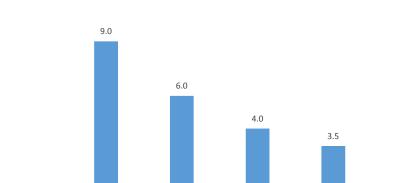


Figure 10: Peak of completed delivery volume over 2013-2016

Source: China National Bureau of Statistics, AliResearch

Digital economy also drives logistics service upgrade. The time to finish delivery of 100 million parcels in 2016 Singles' Day Shopping Festival was 3.5 days, compared with 6 days in 2014 and 9 days in 2013. The number of 2016 festival's parcels is 4 times of that in 2013, but the efficiency improved by 1.6 times.



2014

Figure 11: Time to complete delivery of 100 million parcels in Singles' Day Shopping Festival over 2013-2016

2015

2016

Source: AliResearch

Case 5:
Backbone network of Cainiao smart logistics

On May 28, 2013, Alibaba Group and partners established Cainiao Network Technology Co. and officially launched "China Smart Logistic Backbone Network Initiative".

- Ground network: build large warehouses and the backbone network for e-commerce logistics in major cities.
- Sky network: drive logistics industry upgrade through big data analytics, cloud computing and internet of things. Establish an open, transparent and sharing data platform. Connect with transportation enterprises, express companies, railway transportation and airlines. Finally establish an open, transparent and sharing logistics information platform.
- Human network: build the open "last kilometer" platform; all the manufacturers, e-entrepreneurs, logistics companies, third-party service providers and consumers can use it; create a win-win for all.





Section 5 Inclusive technological advancement

Traditional IT (Information Technology) products, such as servers, storage equipment and software, are expensive in terms of both purchase and maintenance. On the other hand, it is inexpensive to use on-demand solutions, such as cloud services for computing, storage and internet instead of purchasing those resources. The barrier to acquire computing capacity is significantly lowered, thus making computing an inclusive technology. As said by Jack Ma, data and computing capacity are becoming the foundation of inclusive economy.

As centralized power supply weakens the advantage of big enterprises and speeds up the growth of SMEs in the industrial revolution, the rapid development of cloud computing services changes the large enterprises' monopoly of computing power and supports innovation and entrepreneurship of SMEs in the DT (Data Technology) era.

I. Cloud computing reduces the technological barrier and trial-and-error cost for startups

Many internet-based products are born on the cloud platform. As an easy-to-use solution, internet apps such as Myotee, Changba, Truck Alliance, Face++, MomentCam and inke, experiencing explosive growth within a very short period of time, all use Alibaba Cloud services.

According to the report released by AliResearch, 60% of the entrepreneurs on Alibaba Cloud start their businesses for the first time. The public cloud computing platform reduces the computing cost by 70% and increases the innovation efficiency by 300%. Cloud computing has become the fundamental computing infrastructure. The more mature the cloud computing is, the lower the cost of breakthrough from 0 to 1 takes and the shorter the cycle is.

Case 6: Cloud computing empowers SMEs

China-made cartoon movie Little Door God has won good reputation. Its total rendering hours are longer than Kung Fu Panda 2 and Big Hero 6. It takes 80 million hours to use the single-CPU solution. It only takes Alibaba Cloud 20 minutes to finish a month's work load of the single-CPU solution, which runs 2,000+ servers with computing capacity of 10,000+ CPUs. The speed increases by 1,500 times.

II. Cloud computing speeds up innovation

Cloud computing serves both entrepreneurs and innovators. Numerous innovation incubators also emerge. Many innovators make their idea a reality on the cloud computing platform.

Cloud computing empowers SMEs for rapid development. SMEs do not have the capability or time to quickly expand its IT resources by the traditional "computer + software" approach to meet the temporary peak demand. On the other hand, ondemand service of cloud computing perfectly serves such purpose.

In addition, cloud computing provides the computing capacity, identical to the big enterprises, for scientific research institutions and enterprises. As R&D is often highly

SMEs do not have the capability or time to quickly expand its IT resources to meet the temporary peak demand. On the other hand, on-demand service of cloud computing perfectly serves such purpose.

Traditional IT

Cloud computing

Public IT service

Dedicated IT maintenance team not required

Slow business innovation

Fast innovation & iteration

Low barrier and cost

Figure 12: Comparison of traditional IT and cloud solutions

Source: AliResearch

analytics-dependent, powerful computing capacity can realize the full potential of ideas and discoveries and make them more productive in the real economy, which also fuels SMEs' innovation and development.

III. Cloud computing lays the foundation for innovation in the era of big data

The emergence of cloud computing enables the data integration, sharing and flow. In particular, data can circulate among different enterprises and create new value. AlphaGo and Master demonstrate the strength of the combination of computing, data and algorithm. It is the cloud computing that makes AI an applicable technology and lays the foundation of technological innovation in the future.

Case 7: Cloud computing makes the dream of a railway worker come true

Wu Lei is an ordinary technical staff from Ankang maintenance division of Xi'an Railway Bureau. He is responsible for maintaining over 1000-kilometer Xiangyang-Chongqing Railway and needs to check 40 stations all year round. One of his duties is to pass emergency documents and notices to workers on various railway sections. In the past, he had to print the documents and visit all the stations, some of which are in the mountains.

He happened to know the concept of cloud computing. Cloud computing refers to the elastic, cheap and distributed computing capacity provided through the internet. He developed an e-document distribution system with Alibaba Cloud. Then the instructions may be quickly passed to the maintenance divisions in the mountains, so as to avoid production violation and ensure safety.

Wu Lei and his partners have now extended the application to natural hazard prevention. They have developed Beidou Flood and Disaster Prevention Monitoring System based on cloud computing. The change of dangerous rock can be monitored on a real-time basis through "cloud" positioning. Thus, the landslide can be monitored automatically 24/7.









Chapter III Inclusive impacts of e-commerce on China's economic and social welfare

Section 1 Promote SME development

In an open and transparent e-commerce marketplace, all enterprises may display their products, search demands and directly connect domestic/overseas retailers and consumers. As the layers of intermediaries are largely reduced, transaction cost declines and efficiency improves. Market participants are able to coordinate development plans and identify win-win transactions due to information transparency. In particular, SMEs have direct access to consumers and are motivated to make more efforts in self-brand building, innovation and upgrade.

Case 8: Suppliers directly serve consumers through e-commerce

Cao Yuewei, the founder of Joyme, has been the supplier for IKEA for 16 years. In October 2011, some IKEA suppliers in China merged into Joyme Furniture Co., Ltd. At the beginning, Cao Yuewei took e-commerce as his first choice due to the disadvantages of the off-line channel, such as high initial investment, long cash flow cycle and high market uncertainty. On the Tmall and Taobao platforms, Joyme directly reached consumers, which significantly reduced the layers of distributors. Production could also be arranged more efficiently as orders and manufacturing could be pooled. Consumers saved by 30-40% and factory's profit margin rose to 20% from 5%. E-commerce re-engineered the whole value chain.

Case 9: Internet speeds up SME development

Internet entered China in 1994. Web portals were the first wave of entrepreneurship and innovation on the internet. Those SMEs, such as China.com (listed in July 1999), Sina (listed in April 2000), NetEase (listed in June 2000) and Sohu (listed in July 2000), experienced rapid development. Those role models spurred more and more new web portals and start-ups in various fragmented markets. Alibaba, Tencent, and Baidu have even grown into today's global giants.

I. E-commerce creates more innovation and entrepreneurship opportunities for young people

Young people dominate Taobao. Among the 423 million active users, those born after 1980 account for 80% and the proportion of those born after 1990 is 35%. Taobao Maker Festival is a good example demonstrating that young people have become the driving force of innovation. Growing up after China opened up to the world, this generation enjoys better education and is much more familiar with foreign culture, modern science and technology, compared with the older generation. They no longer regard work as something have-to-do or related to basic living. Instead, they are enthusiastic to create and innovate something for self-fulfillment.

Joyme directly reached consumers, which significantly reduced the layers of distributors. Production could also be arranged more efficiently as orders and manufacturing could be pooled. Consumers saved by 30-40% and factory's profit margin rose to 20% from 5%. E-commerce reengineered the whole

value chain.

Young people dominate Taobao. Those born after 1980 account for 80% and the proportion of those born after 1990 is 35%.

Case 10: Taobao Maker Festival demonstrates incredible creativity of internet and young people

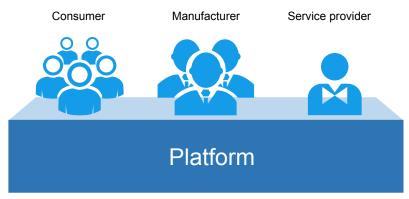
Taobao Maker Festival demonstrates that all can participate in innovation and entrepreneurship, no matter you are rich or poor and no matter how old you are.

On the Taobao platform, the world's largest retail marketplace, over 1 billion products are available on-line and 100+ million new products are launched each month. In addition, Taobao accommodates more than 500 independent apparel designer brands, thousands of independent home furnishing designer brands, over 6,000 start-up projects, more than 500 independent sport fashion brands and over 200 original IPs under incubation.

II. E-commerce greatly reduces SMEs' cost for innovation & entrepreneurship

E-commerce platform provides various tools, customers and services, which significantly reduce the early-stage fixed cost for start-ups. Besides, internet technology greatly reduces transaction cost. Internet technology enables more and more frequent cooperation among companies, which can be transactional, operational or strategic, as information is circulating on the internet. To a certain extent, the boundaries of companies blur. When internal cost is higher than external market transaction price, big enterprises are encouraged to re-organize to promote internal entrepreneurship. In addition, a group of SMEs can cooperate through e-commerce platform as a big one.

Figure 13: Service ecosystem and innovation & entrepreneurship



Source: AliResearch

III. E-commerce provides SMEs with a brand-new service system.

E-commerce service system equips SMEs with professional capabilities that only big enterprises can afford to build. Multi-stakeholders organize a dynamic service ecosystem, including creative ideas, design, raw materials, manufacturing, channel, platform, third-party service providers and end users. The ecosystem is featured by "large platform, small front end and various species", where the platform connects groups at different locations and enables frequent interactions among them. The cross-company cooperation lays the foundation for the open innovation system, compared with the internal innovation model within a particular organization.

On the Taobao platform over 1 billion products are available online and 100+ million new products are launched each month. In addition, Taobao accommodates more than 500 independent apparel designer brands, thousands of independent home furnishing designer brands, over 6,000 start-up projects, more than 500 independent sport fashion brands and over 200 original IPs under incubation.



Case 11: The innovation service system of Taobao

Taobao provides young people with the one-stop solution for R&D, production, marketing and IP protection. For example, "JIYOUJIA" supports independent home furnishing designer shops; "CDJ.TAOBAO.COM" helps small technology startups and smart hardware companies; "hi.taobao.com" helps to finance thousands of projects; "CHUANGXINBAO" helps merchants to apply for both domestic and international trademark registration simply at one click, etc. In addition, many goods and interest communities are emerging, which provides a more favorable environment for innovation in various market segments, such as "Ask others", "Taobao headlines", "Taobao live", "Weitao", "Youhaohuo", "Aiguangjie", etc.

IV. Integration between traditional industries and internet speeds up SME development

E-commerce is driving integration between traditional industries and internet. Media, publication, advertisement, marketing and communication are the first batch of industries to encounter e-commerce. Retail, transportation, restaurant, tourism and education are then transformed, followed by wholesale, manufacturing, financial services, real estate and energy. Internet has gradually gained traction from

innovation and entrepreneurship.

Retail Communication Transportation Finance Advertisement Catering Real estate Media & Catering publication Energy

Figure 14: Integration between traditional industries and internet

Source: AliResearch

integration between traditional industries and internet.

E-commerce is driving

Case 12: China government promotes integration between internet and traditional industries

In 2015, China government launched a series of national and regional "Internet+" initiatives, that is, integration between internet and traditional industries, which kicks off the new wave of innovation and entrepreneurship. "Internet+" depends on constant breakthroughs in information technology. Cloud computing, characteristic of low cost, high flexibility and strong computing power, supports SMEs across all industries and their innovative activities. Cloud computing, as a general purpose technology, enables inclusive growth. Thanks to the cloud computing platform, global data volume experiences explosive growth. According to the report of IDC, global data volume exceeded 1 ZB (equal to 1012 GB) in 2010 and is expected to reach 44 ZB in 2020. Such volume of big data is hidden treasure and can become a productive factor in the future. Alibaba Cloud is the flagship cloud computing service provider in China. Development of cloud computing and big data technology has revitalized the IoT (internet-of-things) industry. The number of connected devices keeps increasing and IoT-based applications start to function.

In 2015, China government launched a series of national and regional "Internet+" initiatives, that is, integration between internet and traditional industries, which kicks off the new wave of innovation and entrepreneurship.

Case 13: SMEs grow rapidly in the wave of Internet+

In the wave of "Internet+", a group of SMEs have grown into "unicorns", which are the market leaders in specific segments and compete with internet giants such as BAT. For example, Xiaomi and Meizu in smart device, S. F. Express in logistics, Ant Financial Services Group and LU.COM in internet finance, Didi in taxi service, 58.com and ele.me in O2O service, etc. Internet+ has raised the efficiency of traditional agriculture, manufacturing and service industries. In particular, collaborative/open innovation creates a completely new business model with great economic and social values. Local governments have used various initiatives to create a favorable environment for innovation and start-ups, such as incubator, shared working space, tax deduction and other supporting facilities. Platforms also contribute to Internet+ by empowering SMEs and nurturing the ecosystem.

Didi is a typical example. It now runs multiple service lines and is able to provide one-stop solution of taxi, sharing ride, corporate car, bus, driver service and test drive etc. Up to October 2015, it had over 250 million registered users and served over 10 million customers each day, covering more than 360 cities. It leverages data mining to improve utilization of urban transportation resources. The sharing ride business model combined with advanced algorithm technology achieves a win-win: riders enjoy more convenient service, drivers earn extra income, and air pollution may be reduced. Sharing ride service provides a new direction to solve urban traffic problems.

In the wave of "Internet+", a group of SMEs have grown into "unicorns", which are the market leaders in specific segments and compete with internet giants such as BAT.



V. SMEs' micro-innovation is becoming the new norm of innovation in the new economy era

In the new economy, the internal innovation system is too expensive, which is also difficult to adapt to market dynamics and fierce competition. The "open innovation" is gradually becoming the new norm of innovation in advanced companies and regions. In China's "big platform and huge network", micro-innovations are able to enter the market and strengthen competence leveraging the advantages of faster iteration and lower cost. Every innovative entrepreneur has easy access to fund, technology, outsourcing, talents, consultancy or strategic alliance, which better bridges innovative thoughts and commercialization.

Given sufficient market width and depth as well as high collaboration efficiency and low cost, many seemingly micro innovations can be captured by consumers and unleash significant power to drive economic growth. Even 0.01% of efficiency improvement or 0.01% of additional consumers will have substantial impact in a mature market. Platform enterprises, such as Alibaba, Taobao and Tmall, use internet, cloud computing and other technologies to create a big innovation market.

Section 2 Promote rural development

I. Overview of e-commerce in rural China

(1) Rural online consumption

In 2016, the population of rural internet users in China reached 201 million. Rural consumers bought both domestic and overseas goods on-line. In 2017 Alibaba New Year Shopping Festival, the most popular goods were household appliances and food (both with proportions of over 25%), followed by clothes, furniture, cosmetics, etc. Among overseas purchases, mother and baby products (such as milk powder, baby diapers) ranked 1st and accounted for 50.23% of total sales, followed by food (24.35%) and clothes (17.68%) according to the 2017 Chinese new-year goods report jointly released by Alibaba, CBNData and DT Finance.

In 2016, the population of rural internet users in China reached 201 million and rural online consumption rose to RMB 895 billion.

Case 14: E-commerce unleashes the rural purchasing power

In Luotang Village, Songtao County, Guizhou Province, villagers pooled money together to purchase a 18-meter dragon boat for dragon boat race during Dragon Boat Festival; in Xiachuan Village, Youxi County, Fujian Province, villagers purchased 3 pavilions and saved 50% compared with the off-line channel; in Mingshui County of Heilongjiang Province, villager Miaomiao purchased a Honda motor online which was out of stock in the local 4S shop for two months. Villagers purchase clothes, cosmetics, household appliances, agricultural chemicals, etc. through the on-line service station with good quality-price mix, diversified choices and convenient shopping experience.

(2) Rural online retail

In 2016, rural online sales rose to approximately RMB 895 billion according to Ministry of Commerce. Taobao Village is a typical example of online retail in rural areas, which sells local featured products, such as clothes, shoes, apples, and rice. A Taobao village is qualified if its annual sales is over RMB 10 million. Some Taobao Villages even have sales of over RMB 100 million or RMB 1 billion.

Case 15: E-commerce brings rural products to cities

In 2016 Rural Taobao New Year Shopping Festival, 80,000 bottles of Guizhou spicy sauce were sold within 5 hours; 180,000 jin (equal 1/2 kilogram) of Luochuan apples were sold within 11 hours; over 500,000 jin of Gannan navel orange were sold. Finally rural products were sold to 359 cities in 31 provinces.

According to AliResearch, as of the end of August 2016, 1,311 Taobao Villages were found in 18 provinces. Taobao Villages highly concentrated in developed east coast. Zhejiang, Guangdong and Jiangsu had the largest number of Taobao Villages (506, 262, 201), followed by Shandong, Fujian and Hebei (108, 107, 91). Midwest and northeast also had 25 and 5 Taobao Villages. Such distribution is closely related to the spatial pattern of China's industries, transportation and logistics.

A Taobao village is qualified if its annual sales is over RMB 10 million. Some Taobao Villages even have sales of over RMB 100 million or RMB 1 billion.



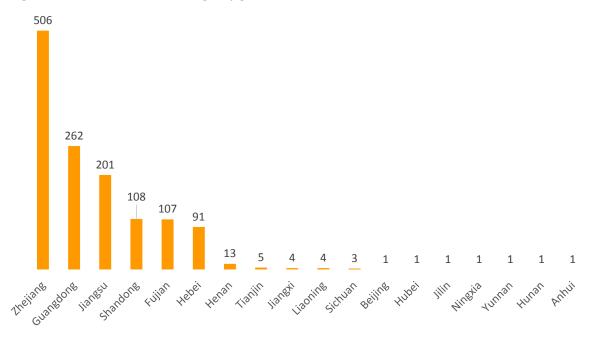


Figure 15: Number of Taobao Villages by province in 2016

Source: AliResearch, Alibaba Research Centre for Rural Dynamics, October 2016

II. Economic and social value of rural e-commerce

(1) Save consumers' spending

According to Alibaba's rural survey, average online price is 20% cheaper than the offline price in rural area. Given the large size of rural online consumption the savings can be billions.

(2) Incubate large number of rural start-ups

As of the end of August 2016, the number of active online Taobao Village stores amounted to more than 300,000. Taobao Villages have become the incubator of startups. As home to 31 Taobao Villages, Shuyang, Jiangsu has strong e-commerce entrepreneurial culture and attracts 6,500 undergraduates, veterans, and migrant workers, etc. to return home to start businesses as of March 2017 according to Shuyang county government. Most of returned villagers entered flowers/plants sales through e-commerce platform.

Case 16: E-commerce creates diversified jobs

In rural area, e-commerce creates diversified and flexible jobs in the neighborhood. E-commerce directly related jobs include customer service, marketing, sales, goods packing & dispatch etc. E-commerce also drives jobs like tailors, carpenters, express delivery men, photographers, etc. In recent years, professional services also emerge in some Taobao Villages, such as lawyers, accountants, patent agents, etc.

Average online price is 20% cheaper than the offline price in rural area.

(3) Create massive job opportunities

E-entrepreneurs, characteristic of low investment and high growth, create direct job opportunities for themselves as well as indirect ones for their upstream and downstream partners. Every additional active online store in a Taobao Village on average creates approximately 2.8 direct job opportunities. It is estimated that active online stores of Taobao Villages created more than 840,000 direct job opportunities by the end of August.

Case 17: Taobao Village job creation in Suining, Jiangsu

Suining, Jiangsu is home to 40 Taobao Villages, which has significant impact on job creation. As of December 2016, there were 36,900 online stores, creating 200,000 job opportunities according to Suining county government.

(4) E-commerce fights poverty

In 2016, there were 18 Taobao Villages in national-level poverty counties, among which 10 were in Pingxiang, Hebei, 2 in Quyang, Hebei and Zhenping, He'nan, 1 in Antu, Jilin, Heqing, Yunnan, Nankang, Jiangxi and Yunxi, Hubei. Furthermore, more than 200 Taobao Villages emerged in provincial-level poverty counties. E-commerce enables villagers in those counties to find jobs and fight poverty.

Case 18: Caoxian's poverty alleviation experience: from monetary assistance to empowerment with e-commerce ecosystem

Caoxian County, Shangdong, a provincial-level poverty county, is home to 48 Taobao villages. As of October 2016, there were more than 35,000 online stores selling costumes, furniture, etc., which lifted more than 6,300 people out of poverty.

Caoxian tries to attract all kinds of talents, including e-commerce entrepreneurs as well as service providers, particularly returned university graduates, migrant workers, logistics, art designers, financial services etc., which lays solid foundation for e-commerce development. It is worth noting that the key is not to provide rural residents with monetary assistance but to create opportunities for them to learn and participate in real e-commerce business.

First, encourage young migrant workers and university graduates, who are the leaders for e-commerce development, to return home and start business. For example, 1,979 returned Daji Town to start businesses and university graduates registered 118 e-commerce companies in 2016 according to Caoxian county government.

Second, attract more e-commerce service providers. Talents such as art designers, photographers, e-commerce operation, finance and logistics are essential for e-commerce enterprise capability enhancement and incubation.

Third, attract top talents to work in Caoxian and more scholars to conduct field research. Experts from Nankai University, Chinese Academy of Social Sciences, Peking University, Tsinghua University, Shanghai University of Finance and Economics, AliResearch etc. contributed a lot of suggestions for e-commerce development and poverty alleviation in Caoxian.

Every additional active online store in a Taobao Village on average creates approximately 2.8 direct job opportunities.

The key is not to provide rural residents with monetary assistance but to create opportunities for them to learn and participate in real e-commerce business.



Case 19: Pingxiang's poverty alleviation experience —— forming joint taskforce from multi-stakeholders

Pingxiang County, Hebei, is a national-level poverty county. The local government launched the e-commerce development policy and listed RMB 3 million of e-commerce development fund in the annual fiscal budget. Meanwhile, Pingxiang built the county-level logistics system and talent training system; educated and led poor households to embrace e-commerce business.

Among 78 poverty villages in the county, more than 40 villages engaged in e-commerce poverty alleviation projects. In 2016, 10 became Taobao Villages. Aicun village, close to the bicycle industrial park, developed e-commerce and craft making, which employed more than 800 poor villagers and increased the annual per capita income by more than RMB 20,000.

Pingxiang is a role model of e-commerce poverty alleviation leveraging the joint forces of market, government and society. The multistakeholder approach is the key for effective and sustainable poverty alleviation.

Pingxiang is a role model of e-commerce poverty alleviation leveraging the joint forces of market, government and society. Market is responsible for allocating resources. Government provides infrastructure, promotion and talent training etc. Villagers, enterprises, industrial parks and e-commerce platforms all actively participated in the ecosystem. The multi-stakeholder approach is the key for effective and sustainable poverty alleviation.



III. Prospects of rural e-commerce in China

Rural e-commerce in China will maintain a sustainable and rapid development due to better broadband and logistics network coverage, e-commerce platform empowerment etc.

In 2013, Chinese government launched "Broadband China" strategy, defining broadband as strategic public infrastructure. The targets by 2020 are to provide broadband access to another \sim 50,000 villages, upgrade \sim 150,000 villages' broadband with optical fiber and improve more than 30 million rural households' broadband coverage.

In 2015, State Post Bureau, Ministry of Commerce and other departments jointly launched "express delivery to cover western and rural China" initiative, targeting 100% service station coverage in towns and 100% delivery coverage in villages" by 2020. The improved express delivery network coverage will escort e-commerce further penetrating in rural area.

E-commerce platforms and integrated service systems will empower grass-roots entrepreneurs with capabilities and services such as transaction, marketing, logistics, finance and data as well as connect them directly with consumers. Vigorous demand is the source for the sustainable development of rural e-commerce.

IV. The experience of rural e-commerce in China is a good reference for other developing countries

Unbalanced development has been the global challenge. Instead of providing monetary assistance, China takes the advantage of e-commerce and creates a new business model in rural area. The rural e-commerce experience in China is a good reference for other developing countries and regions in Asia, South America and Africa. It also contributes to fulfill United Nations' millennium development goals, implement the development agenda after 2015 and build a community of common future in cyberspace.

Alibaba has been cooperating with related organizations to promote the successful experience of rural e-commerce in China. In October 2016, the World Bank and Alibaba signed an agreement for a joint research initiative on how e-Commerce alleviates poverty and fulfills inclusive prosperity. In December 2016, the "Digital Enablement Conference 2016" was hold in Sydney. Scholars demonstrated strong interests in China's rural e-commerce practice. In January 2017, the English edition of Taobao Villages in China was published in New Delhi World Book Fair.

Rural e-commerce in China will maintain a sustainable and rapid development due to better broadband and logistics network coverage, e-commerce platform empowerment etc.

Alibaba has been cooperating with related organizations to promote the successful experience of rural e-commerce in China.





Case 20: Collaboration on e-commerce between United Nations Conference On Trade And Development (UNCTAD) and Alibaba

UNCTAD and Alibaba have been in collaboration on e-commerce & rural development

Three billion people in developing countries live in rural areas. They consist of the majority of the world's poor population and their number will continue to grow until 2030. To boost rural development is the common strategic priority for UNCTAD and Alibaba. The two organizations have been closely working together to promote the success stories of rural growth through e-commerce.

During UNCTAD E-commerce in April 2016 Week, UNCTAD in cooperation with Alibaba organized two meetings on e-commerce & rural development. The first meeting was "E-commerce Strategies for Rural Development" and the second meeting was "Entrepreneurs Empowering Entrepreneurs through E-commerce and E-services" organized through UNCTAD's ICT Policy Review (ICTPR) Programme. Mr. Lijun Sun, Alibaba VP and Head of Rural Taobao was invited as keynote speaker and has been serving as an advisor on rural e-commerce issues to UNCTAD's ICT Policy Review (ICTPR) Programme in the development of the National E-commerce Strategy of Egypt since that meeting. In April 2016, Mr. Sun also met with UNCTAD's Deputy Secretary-General, Mr. Joakim Reiter, to discuss rural e-commerce issues.





ITC is the joint agency of the World Trade Organization and the United Nations dedicated to supporting the internationalization of small and medium-sized enterprises (SMEs). ITC and Alibaba are working closely together to promote inclusive growth through e-commerce, in particular by opening related opportunities for SMEs from developing and least developed countries.

Alibaba and ITC are jointly promoting conducive policies that enable SMEs to better leverage these opportunities. At the joint ITC-B20-CCPIT high-level forum on "E-commerce Dialogue: G20 Policy Options" in May 2016, for example, Alibaba's industry perspectives were shared with policy makers; these insights have helped to shape relevant discussions on e-commerce policies in the context of the G20.

At the firm level, Alibaba is working with ITC's E-Solutions Programme and the Virtual Market Places project to provide access to premium membership to SME exporters in Jordan, Morocco, and Tunisia. The joint ITC-AliResearch publication on "E-Commerce in China: Opportunities for Asian Firms" provides an overview of the business opportunities of accessing the Chinese market through retail e-commerce as well as practical guidelines for SMEs for using e-commerce platforms.

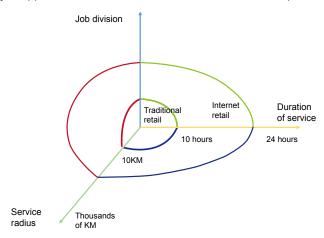
E-commerce has great potential to provide opportunities for inclusive growth and development and the collaboration between ITC and Alibaba should continue to helps SMEs from developing and least developed countries to tap into this potential in the Chinese and global marketplaces.

Section 3 Promote inclusive employment

E-commerce, the new generation of business infrastructure, enables billions of consumers to choose among billions of goods, and millions of entrepreneurs to start online businesses with low investment and low cost anywhere anytime all year round. Meanwhile, the new business model creates the new employment landscape.

Figure 16: New employment landscape in the e-commerce era

New job opportunities: Extended service chain and more specialized job division



Source: AliResearch

I. E-commerce creates 30+ millions of job opportunities

As indicated in the Study on Employment Absorption and Driving Ability of Alibaba Retail E-commerce Platform by School of Labor and Human Resources of Renmin University in September 2016, Alibaba retail ecosystem (Taobao, Tmall and Juhuasuan, etc.) creates 30.83 million job opportunities in China, including 11.76 million transaction-related ones and 19.07 million indirect ones (including 4.18 million supporting ones, and 14.89 million derivative ones). One job in Alibaba retail ecosystem generates 1.62 indirect job opportunities.

Figure 17: Alibaba retail ecosystem job structure

Millions of ecommerce services' jobs

Retail e-commerce platform

After-sales

Upstream-downstream industries

Upstream-downstream industries

Design

Manufacturing

10+ millions sellers

Source: Study on Employment Absorption and Driving Ability of Alibaba Retail E-commerce Platform, Renmin University of China, 2016.9

Alibaba retail ecosystem creates 30.83 million job opportunities in China, including 11.76 million transactionrelated ones and 19.07 million indirect ones.





Case 22: E-commerce creates two million logistics jobs

In recent years, the vigorous development of e-commerce drives the development of express delivery industry, and attracts migrant rural workers who used to work in construction and manufacturing industries to switch to service industry. The five major express delivery enterprises, Zhongtong, Shentong, Yuantong, Baishihuitong and Yunda, have become the cornerstone of private e-commerce logistics in China. According to the Research Report on Employees in Private E-commerce Logistics in China ¹, the total number of private e-commerce logistics employees in China is 2.03 million.



Case 23: E-commerce empowers disadvantaged groups

Removing the restrictions such as age, physical conditions and cultural background, e-commerce provides disabled and disadvantaged groups with equitable opportunities to seek jobs and start own businesses. As of 2015, there were more than 316,000 disabled sellers on the Taobao retail platform. In 2015, the total transaction volume was more than RMB 10 billion. Cui Wanzhi, who has physical disability, opens an online apparel shop and provides 500 job opportunities. Meng Hongwei, who has physical disability, and his paralyzed younger brother sell cattle and sheep online and are awarded as "Global Top 10 e-Entrepreneurs".



Case 24: Women's power in e-commerce

49.4% of the active online stores owners in the Alibaba retail ecosystem are female and they contribute to 46.7% of the total sales. Taobao store is the top priority for more than 6 million women who want to start their own business. With the rapid development of Alibaba retail platform, a lot of excellent female internet entrepreneurs have emerged. There have been female entrepreneurs awarded as "Global Top 10 e-Entrepreneurs" for consecutive 9 years.

^{1.}Research Report on Employees in Socialized E-commerce Logistics in China, Beijing Jiaotong University, 2016.5

II. E-commerce supports employment quality upgrade

Alibaba retail e-commerce ecosystem creates various new jobs, new services and new sectors, such as software design/application, express delivery, third-party payment, etc., which provides large number of jobs for university students and workers in traditional industries. Meanwhile, new jobs provide flexible and diversified opportunities for special skills and talents.

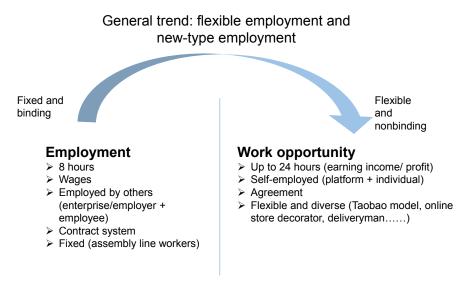
Figure 18: Overview of employment in Alibaba retail ecosystem

Category	Example
Operational Service	Third-party shop and channel management
Information technology service	Purchase, inventory and sales of software, ERP software and IT consultancy
Marketing service	Member marketing, cross-platform marketing and interactive marketing
Design service	Online storefront design, promotion campaign design
Data service	Data consultancy, order analysis, goods optimization analysis
Customer service	Customer service outsourcing, after-sale service
Others	Goods quality test, report review

Source: AliResearch

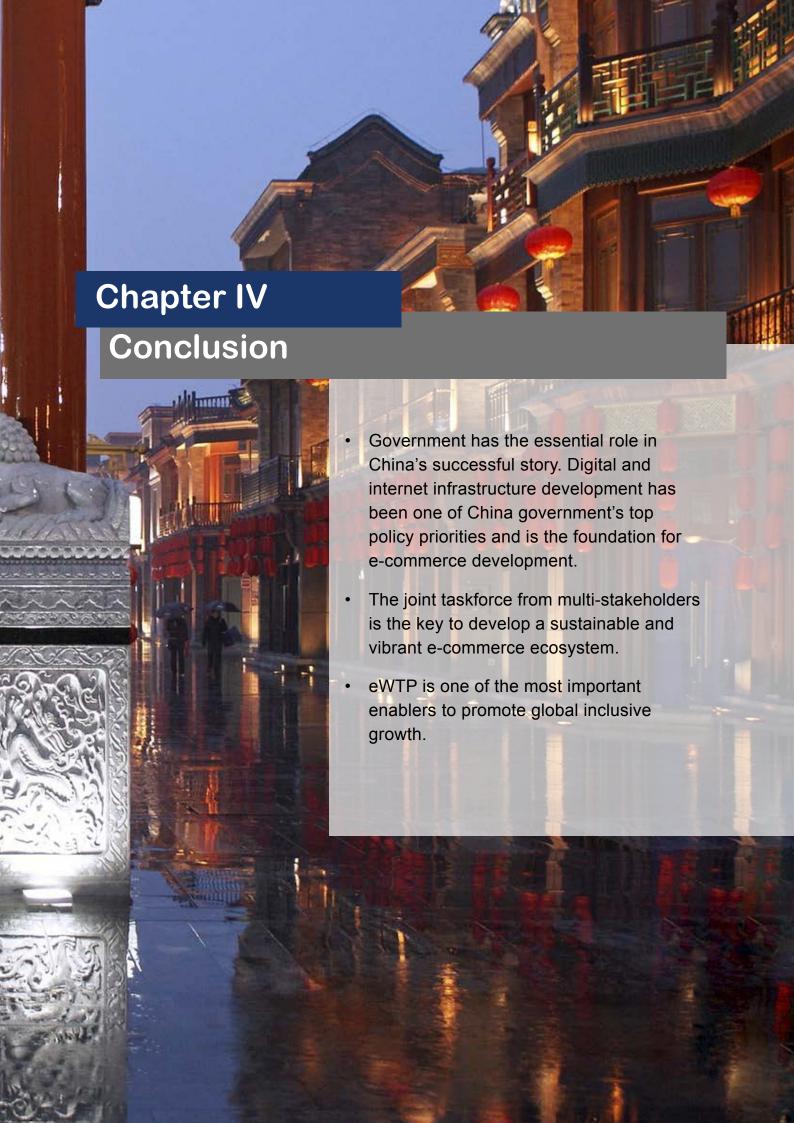
E-entrepreneurs have more freedom and flexibility, thus feeling more happiness. Without business hours constrains, they just need to secure goods supply and know basic online store operation. Integrated working, learning and living is no longer a dream. "SOHO" or "Zhai economy, Zhai life" will not only save resources and improve employment flexibly, but also greatly improve people's life quality.

Figure 19: Employment trend in the future



Source: AliResearch







Chapter IV Conclusion

Although global economy growth has remained stagnant since the 2008 financial crisis, e-commerce, the completely new business infrastructure built on digital technology, is rapidly growing and extending the territory of the "new economy. In particular, e-commerce does not only drive growth but also distribute the resulting benefits more evenly to every section of society. To a certain extent, digital technology and e-commerce have fostered a new growth model – inclusive growth.

E-commerce has become a pillar of China's economy instead of a supplement. By 2016, e-commerce sales has reached RMB 5.2 trillion, accounting for 15.5% of national retail sales; in particular, e-commerce sales of physical goods contributed to 3 percent out of 10.4 percent retail sales growth. Besides, e-commerce has created the new business norms and transformed the nation's economic landscape. For example, cross-border e-commerce enables more than 3 billion internet users to buy/ sell globally at one simple click, which used to be dominated by large international traders.

China has also demonstrated how to use digital technology and e-commerce to drive inclusive growth.

- Cross-border e-commerce empowers SMEs with professional capabilities, which
 only big companies could acquire in the past, and provides SMEs with direct
 access to consumers across the globe.
- The greatest challenge for inclusive finance is to balance promoting inclusiveness and fulfilling responsibility of being profitable as a business organization. China's experience is a showcase how to use digital-technology-driven and credit-system-based financial system to solve the challenge.
- E-commerce unleashes rural residents' purchasing power and drives the development of the rural logistics system. Within 20 years, express delivery covers nearly 3,000 counties as well as rural area.
- Cloud computing redefines the landscape of information technology solutions.
 The on-demand and sharing nature of cloud computing provides an alternative inexpensive solution which promotes innovation and SMEs.
- E-commerce creates the new business norm for SMEs, which provides more innovation and entrepreneurship opportunities for young people, lower cost/ investment and a brand-new service system.
- E-commerce is the key to narrow the urban-rural gap. Instead of providing monetary assistance, China leverages e-commerce to create a sustainable business model in rural area.
- E-commerce is able to create massive job opportunities. Alibaba retail platform alone creates over 30 million job opportunities in China. Besides, it removes the restrictions, such as age and physical conditions, and provides disabled and disadvantaged groups with equitable opportunities.

Unbalanced development has been the global challenge. The e-commerce experience in China is a good reference for other developing countries and regions in Asia, South America and Africa. First, government has the essential role in China's successful story. Digital and internet infrastructure development has been one of China government' top policy priorities and is the foundation for e-commerce development. In addition, the joint taskforce from multi-stakeholders (e.g. government, company, etc.) is the key to develop a sustainable and vibrant e-commerce ecosystem.

eWTP (Electronic World Trade Platform) is one of the most important enablers to fulfill the target of global inclusive growth. The eWTP would help SMEs overcome complex regulations, processes and barriers that hinder their participation in global commerce. An increasing amount of local, regional, national and international commerce is conducted on a variety of platforms on the Internet. This relatively new and comparatively frictionless method of conducting business on the digital platform can enable more countries, enterprises and entrepreneurs to participate in global trade and reap the benefits of globalization. The explosive worldwide growth of e-commerce is spawning new business models. It has the potential to spark fundamental changes in the way international trade is conducted by lowering costs, reducing and streamlining intermediaries, improving access to information and financing, and shortening global supply chains.



Authors

Cheng Ouyang, Executive Senior Consultant, AliResearch Yonghua Pan, Senior Consultant, AliResearch Zhenzhong Sheng, Senior Consultant, AliResearch Jiaqi Feng, Senior Consultant, AntFinancial Xin Cheng, Senior Consultant, AliResearch Yan Xue, Consultant, AliResearch Jianbin Hao, Consultant, AliResearch Hanwen Cui, Consultant, AliResearch Ri Su, Consultant, AliResearch

Graphic design

Jiaxin Zuo, Graphic Specialist, AliResearch

Acknowledgements

The authors would like to thank Quan Zhao, Trade Policy Advisor of International Trade Center, and Torbjorn Fredriksson, Chief of ICT Analysis Section Science, Technology and ICT Branch, Division on Technology and Logistics, UNCTAD, for their significant contributions to the development of this report. A special thanks to Hongbing Gao, Vice President of Alibaba Group and Director of AliResearch for providing significant guidance in the overall development and review of this article.





Visit AliResearch

Download report