

E-Commerce as Asia's New Growth Engine

By FUKUNARI KIMURA and LURONG CHEN

Key Issue:

- *Developing Asia has big potentials in developing digital economy and e-commerce*
- *Asian countries should pay attention to challenges from (i) connectivity, (ii) services, (iii) rules and regulations, and (iv) labour skills*
- *Policy effort, including national and regional strategic development plans and associated economic policies, will promote the growth of e-commerce and make it work for development by improving the condition in economy, culture and society*
- *Smartphone economy and Internet financial innovation could be two breakthroughs of development*

Fukunari Kimura
Economic Research Institute
for ASEAN and East Asia
(ERIA) and Keio University

Lurong Chen
Economic Research Institute
for ASEAN and East Asia
(ERIA)

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The development of cross-border electronic commerce (e-commerce) is changing the world's economic landscape. To better grasp the opportunities of this global trend of growth, Asian countries will still need to make progress in areas such as connectivity, services, rules and regulations, and labour skills. In addition to market mechanism that shall lead the transition, government policy can help the market maximize the advantage of information revolution, and avoid potential market failure. Asian countries may consider policy effort on promoting e-commerce from following aspects:

- Enabling an e-commerce growth environment
- Improving connectivity
- Encouraging value-added services
- Accelerating rule-setting and regulatory harmonization
- Promoting Internet financial innovation
- Prioritizing the development of smartphone economy

Development of e-commerce as a Global Trend

E-commerce has been radically altering our society. Cross-border e-commerce has introduced new dynamics to international trade. E-commerce sales have climbed steadily worldwide, with sustained growth in sight. Global revenue from cross-border e-commerce was projected to reach US\$600 billion in 2018, twice as much as that in 2012.

Asia-Pacific is the region where e-commerce experienced fastest growth in the world. The share of e-commerce in total global retail sales increased by 12 percentage points between 2015 and 2016. By June 2016, the scale of online shoppers in China has reached 448 million and online shopping usage rate has reached 63% (CNNIC, 2016). Singapore (60%), Malaysia (52%), and Thailand (51%) are among the world's top markets with the highest online shopping penetration rate as well. In the next 5 years, an increasing share of private consumption increment will come from global e-commerce growth. Sustained growth of online shoppers provides the solid base of e-commerce consumption. Overall, the scale of digital economy in ASEAN is projected to increase by 5.5 times by 2025 (Think with Google, 2017). At the time, the Asian market will account for nearly 40% of the world total revenues generated by cross-border e-commerce, making Asia the global epicentre of e-commerce (BCG, 2014).

Asia's big potentials in developing digital economy

The radical growth of e-commerce could be a double-edged sword. On one side, economic digitalization tends to facilitate international trade since consumers and producers can obtain information from a wide range of geographical locations at low cost within a short time. This injects new dynamics into the global market. With new entrants, new products,

new services, new business models, as well as changes in innovation and technology diffusion processes, the price level is lowered, the variety of supply increases, and market competition intensifies. On the other side, the region needs to face more intensive competition, either within the region or with the outside world. Technology progress may widen development gaps among countries, if those latecomers cannot manage to grasp the opportunities to accelerate the growth. Equally, there is no guarantee that frontrunners in the past can still perform well in the future. In a digital economy, one should continuously adjust in response to technology and market changes to keep the edge of competition sharp. In this regard, Asia needs to maximize the e-commerce-related opportunities but minimize or eliminate the associated risks to turn the potential into a real engine of growth. There are three sources of potential: (i) adaptiveness, (ii) market gravitation, and (iii) readiness.

Adaptiveness: Economic digitalization is a worldwide phenomenon. Information revolution is associated with the emergence of new market conditions and dynamics in global business environment. To some extent, the region's adaptiveness to global economic digitalization comes from its capacity in technology adoption and incremental innovation. On one hand, deep involvement to global value chains (GVCs) has opened the window for developing Asia to access the latest technologies. On the other hand, countries' capacity in incremental innovation allows them to benefit from second-mover advantages to grow faster and even jump to the market frontier—the popular use of e-payment in China and the success of the Alibaba group are typical examples. Region-wide, facilitation of the growth of e-commerce is one of the six main areas^{1*} covered by the E-ASEAN Framework Agreement, while at the national level, development of digital economy and e-commerce has already been part of most Asian countries' national strategies and action plans.

Market gravitation: Despite new features of digital economy, traditional conditions for economic development, such as market size, trade facilitation, investment freedom, and others—still influence the development of e-commerce. Asia covers almost half of the world population, nearly 30% of the world's gross domestic product (GDP) and 40% of world trade. On age distribution, 70% of population is between 15 and 64 years old, representing a large market of consumers and a big group of labour force. By 2015, more than 1.2 billion of people, or about half of households in the region, already had access to Internet.

Population with Internet connection not only represents consumers directly linked to the e-commerce market but also suggests those who may have higher purchasing power in the society. In the case of ASEAN, Internet has been very popular in Singapore and Malaysia, and plays an important role in their economies. Nearly 90% of households in

Singapore are Internet users. In 2012, Internet-related economy accounted for 4.1% of Malaysian GDP (McKinsey Global Institute 2016). Less-developed CLMV countries—Cambodia, Lao PDR, Myanmar, and Viet Nam—are quickly catching up. For instance, the share of Internet users in the total population of Viet Nam increased from 1.3% to 52.7% between 2001 and 2015. The number of Internet users grew at 34.7% in Cambodia and 32.4% in Myanmar every year.

Readiness: E-commerce development needs support from technology, market, and policy. Countries' preparation and readiness to support the digital economy will determine the performance of their business in e-commerce. The development of e-commerce got accelerated by information and communications technology (ICT) that expanded the volume and capacity of online communications, especially the use of fibre-optic cables and commercial satellites. Moreover, physical infrastructure that provides stable, good-speed Internet connection is a precondition of e-commerce development. Asian countries have made great progress in mobile broadband building. By the end of 2014, mobile broadband covered above 43% of the region. The relative cost of data usage, as measured by its share in gross national income (GNI), decreased from 37% in 2010 to 6.2% in 2013. With the expansion of mobile broadband, the popularization of smartphones, the reduction in the cost of data usage, and the richness of online shopping and payment tools available on portable devices and platforms, a new wave of e-commerce growth is under way.

Challenges to the development of e-commerce in Asia

Challenges coexist with opportunities of digital economy. In particular, Asian countries need to pay more attention to (i) connectivity, (ii) services, (iii) rules and regulations, and (iv) labour skills.

Connectivity: This is the cornerstone of e-commerce development. It consists of (i) smooth exchange of data and information, (ii) delivery of goods and services, (iii) payment, and (iv) seamless links between virtual and physical part of e-commerce network. For ASEAN and East Asia, the main challenge comes from development gaps existing across different parts of the region, especially between metropolitan areas and remote rural areas. The overall regional connectivity is to some extent limited by those 'short slabs'.

Services: Improvement of services is equally important as building physical infrastructure in every aspect of connectivity—from speed and accuracy to transparency and reliability. For instance, it is the existence of a reliable credit guarantee system that has effectively stimulated cross-border business-to-business (B2B) e-commerce. Online e-commerce platform can collect and integrate information from various sources and provide users service packages. Both buyers and sellers would like to share with service providers real transaction data given the

¹ The framework covers (i) ASEAN Information Infrastructure, (ii) e-commerce, (iii) trade and investment liberalization in ICT goods and services, (iv) trade facilitation in ICT products, (v) e-society, and (vi) e-government.

sellers have a reliable transaction credit system to help them gain trust and therefore get better business opportunities.

Rules and regulations: Cross-border e-commerce calls for new rules and regulations to improve trust, security, and facility in the online marketplace. Without necessary regulations, there are risks that online business may give birth to some sort of 'grey' zones of international trade associated with problems, such as tax evasion, fake product, or violation of intellectual property rights. Cross-border e-commerce needs collaboration among governments and private sector participation to set up rules and regulations to strengthen global e-commerce governance. Partially because of the stalemate of the World Trade Organization (WTO), issues about e-commerce are mainly addressed in bilateral free trade agreements. Developed countries and big multinational companies are the main driving force behind the process. This implies twofold challenges to developing countries in Asia. First, the governments should be more active in international negotiation on new rules setting. Second, voice from the private sector in developing countries should be equally heard to improve the inclusiveness of international agreement or agreements on e-commerce.

Labour skills: Digital economy has higher demands on high skills. First, e-commerce is knowledge-intensive. Second, GVCs functioning behind e-commerce need high managerial skills to operate the network and monitor its functioning. Third, with the rapid growth of business to consumer (B2C) and customer to customer (C2C), more skills and knowledge that only experts used to have become necessary for e-commerce users. Fourth, human capital in e-commerce should be able to learn quickly about new technologies and business models that continuously emerge in the market. Fifth, innovation is a key to long-term success in e-commerce. The related challenge is basically twofold. On the one hand, it poses direct pressure on the countries' education and training system, both on the coverage and the quality of education. On the other hand, it calls for free movement of skilled labour to help diffuse knowledge.

Policy efforts on promoting e-commerce development in Asia

In a nutshell, the market's actions will determine whether and how to benefit from the new trend of global economy. But national and regional strategic development plans, as well as associated economic policies, will certainly play a role. When implementing the plans, however, it is highly recommended that government not directly intervene in the market. Asian countries may consider policy effort on promoting e-commerce through the following aspects:

Enabling an e-commerce growth environment

E-commerce needs a suitable environment to grow. It appreciates the government's support in establishing and optimizing such environment, especially in areas where the market mechanism fails to allocate resources. It is noteworthy that value chains of e-commerce cover both the

physical world and the virtual cyberspace. These two 'worlds' influence each other. For instance, the performance of fibre-optic cables will determine the speed of data flow on the Internet, whereas major cyberattacks may lead to chaos in the real world. In this regard, government's role is to set up rules, regulations, and legislation in both the physical and virtual parts of the market to ensure the security and stability of e-commerce growth.

When e-commerce goes international, it is subjected to almost all issues that apply to other forms of trade. In particular, data protectionism may damage cross-border e-commerce as trade protectionism harms international trade since cross-border data flows stay at the core of cross-border e-commerce. In principle, Asian countries will benefit from collaboration in the region-wide e-commerce enabling environment.

Improving connectivity

Although improving connectivity will less likely totally eliminate digital divide, either among or within countries, it will contribute to reduce such divide by increasing the supply of public goods, in both quantity and quality. The public sector should lead in building infrastructure. But involvement of the private sector is needed to make the development sustainable. Public-private partnerships and inter-governmental cooperation and foreign investment should be encouraged.

To some countries, one big obstacle comes from capacity and resource limits, either capital or technology or both. Enhancing regional cooperation is a possible solution.

In addition to investment in physical infrastructure, improvement in the quality of services is directly linked to the quality of overall connectivity. This is important particularly in cross-border e-commerce. Typically, logistics integrators play a crucial role in the distribution network of cross-border e-commerce, as they stay at the stage that brings together online and offline supply chains of different countries. Despite well-constructed infrastructure, connectivity cannot function well without input of qualified services.

Encouraging value-added services

Support services of cross-border e-commerce tend to have extensive implications on regional development because of their externality to the economy. Second, service efficiency will save trade cost, increase reliability, and therefore promote e-commerce activities. Third, the resulting increase in government revenue will provide additional resources to further improve connectivity.

One can expect the development of e-commerce to generate more business opportunities for downstream companies in areas such as material suppliers, market investigation, software development, shipment and delivery, agency operation, search for key words, and optimization. As production network clustering around the upstream core e-commerce actor(s) starts to deepen and spread, it leads to a finer division of labour and therefore higher degree of specialization. With market segmentation, demand is more precisely identified and,

therefore, more service activities will find space for expansion. In this way, the growth of services can be market-driven.

This also generates opportunities for small and medium-sized enterprises (SMEs) to join GVCs. In Asia, SMEs account for over 95% of all enterprises in number and employ more than 80% of the workforce. Development of e-commerce and expansion of GVCs and related services help SMEs get involved in GVCs and benefit more from globalization. These facilitate SMEs' access to information, exploring new market, obtaining microfinance, and enhancing supplier–producer–consumer links.

Accelerating rule setting and regulatory harmonization

The online marketplace needs rules and regulations to ensure free data flows, as well as fair play, competition, and security. Internationally, cross-border e-commerce development promotes formation of global governance on digital trade. These new rules and regulations will then greatly influence the development of cross-border e-commerce.

Cross-border e-commerce is a major development trend of international trade and globalization. Asian countries may hook up their development to this global trend to reduce poverty, narrow inequality, or get out of the middle-income trap. Accordingly, they should adopt policies in favour of globalization and trade facilitation by removing tariff or non-tariff barriers and simplifying customs, inspection, and taxation procedures, etc.

As for global trade governance, the so-called twenty-first century free trade agreements tend to be pilots in new rule-making. Developing countries in Asia should play actively in new rule making and keep pace with the progress. It is better for the region to move as a group to ensure its voice is heard. Reaching region-wide harmonization on e-commerce-related regulations will be helpful.

Promoting Internet financial innovation

Banking and finance sector development in many Asian countries lags behind the countries' achievement in other aspects of economic growth. Following the traditional approach to establish a modern banking system that developed countries have today will take time.

E-commerce deriving financial innovations, such as e-payment and Internet financing, provide alternative lower-cost (and easier-to-use) solutions to the market. They can be either complementary or independent to the traditional banking and financial architecture. Indeed, they are very efficient that even traditional financial service providers are eager to adopt these new models.

Internet financial innovations tend to be market changers and give developing countries opportunities to achieve leap-forward development. The process can be market-driven and self-enforced as far as it does not encounter serious policy resistance. Policy efforts at the regional level, such as establishing industrial standards and harmonizing regulations, could help the industry realize the scale of economy and support its development.

Prioritizing the development of smartphone economy

Smartphones and mobile applications (apps) provide a powerful new platform for e-commerce growth. Technical conditions on using smartphone in e-commerce have been mature – both in terms of functionality and affordability of phones, and the variety and reliability of apps to be installed. Market conditions are in favour as well. Both the price of the device and the cost of mobile data use have been driven down dramatically.

Cross-border e-commerce based on smartphone and related mobile devices has huge potential. To accelerate cross-border e-commerce, Asian countries can think of prioritizing the development on smartphones and mobile apps. Accordingly, policy efforts should:

- (1) Emphasize the supporting infrastructure of smartphones, such as increasing wireless bandwidth and the number of Internet exchange points (IXPs).
- (2) Keep driving down the cost of mobile data use, including roaming data use. Governments should intervene to save the Internet service provider from market price failure, which is normally monopolistic or oligopolistic.
- (3) Care about low-income people that cannot afford smartphones. Government should think of providing subsidy (or encouraging business donation) to help them obtain the device and, moreover, provide them necessary training.
- (4) Encourage creation and incremental innovation.

References

- BCG (2014), Cross-border E-commerce Makes the World Flatter. Available at: <https://www.bcg.com/perspectives/170622>
- CNNIC (2016), The 38th Report of China Internet Development Statistics. Available at: http://www.cnnic.cn/hlwfzj/hlwxzbg/hlwtjbg/201608/t20160803_54392.htm
- McKinsey Global Institute (2012), Online and Upcoming: The Internet's Impact on Aspiring Countries. Available at: <http://www.mckinsey.com/industries/high-tech/our-insights/impact-of-the-internet-on-aspiring-countries>
- Think with Google (2017), E-economy SEA, Unlocking the \$200 Billion Digital Opportunity in Southeast Asia. Available at: <http://apac.thinkwithgoogle.com/research-studies/e-economy-sea-unlocking-200b-digital-opportunity.html>



Headquarters:
The ASEAN Secretariat
Mezzanine Floor
70A Jalan Sisingamangaraja
Jakarta 12110,
Indonesia

Annex Office (mailing address):
Sentral Senayan II 5th & 6th Floors
Jalan Asia Afrika No. 8,
Gelora Bung Karno, Senayan,
Jakarta Pusat 10270,
Indonesia

Tel: (62-21) 5797-4460
Fax: (62-21) 5797-4464
E-mail: contactus@eria.org

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