

Embracing the Ecommerce Revolution in Asia and the Pacific

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Workshop on Environmental Readiness for E-commerce: Economic, legal and institutional factors
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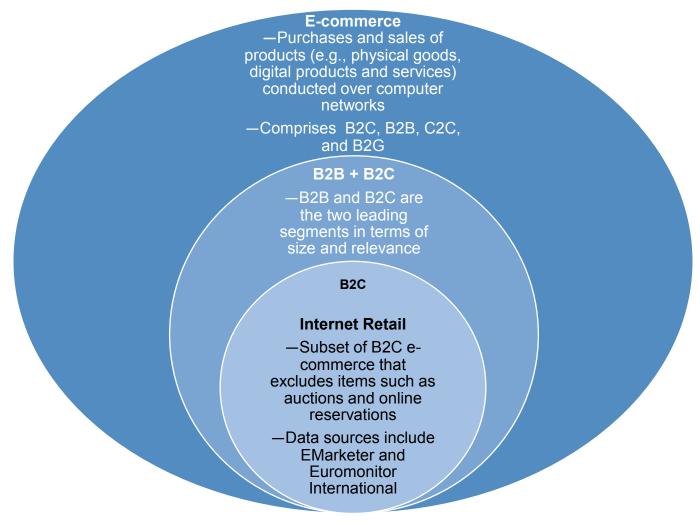
Key messages

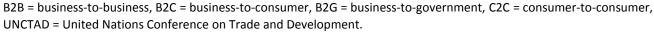
- E-commerce revolution in Asia and the Pacific presents vast economic potential
- E-commerce market in the region remains highly heterogeneous in (i) economic factors and conditions, (ii) legal and institutional environment and (iii) social acceptance
- The emergence of new technologies will significantly impact the e-commerce landscape
- Border procedures and regulatory burdens should improve to foster cross-border e-commerce
- Developing an e-commerce ecosystem requires a holistic approach and concerted efforts by all stakeholders

Evolution of E-commerce in Asia and the Pacific



Coverage of E-Commerce



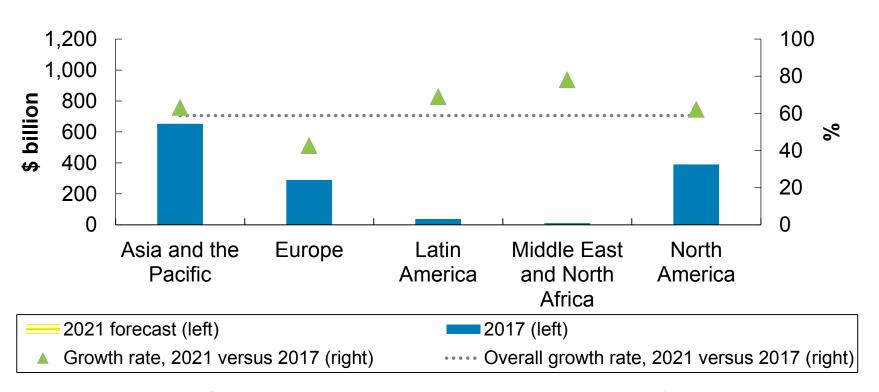


Sources: Ecommerce Foundation (2016a), eMarketer (2017b), Euromonitor International (2018), and UNCTAD (2015).



Asia and the Pacific is the largest and fast growing e-commerce market

Comparison of Internet Retailing Market Size, 2017-2021 (forecast)

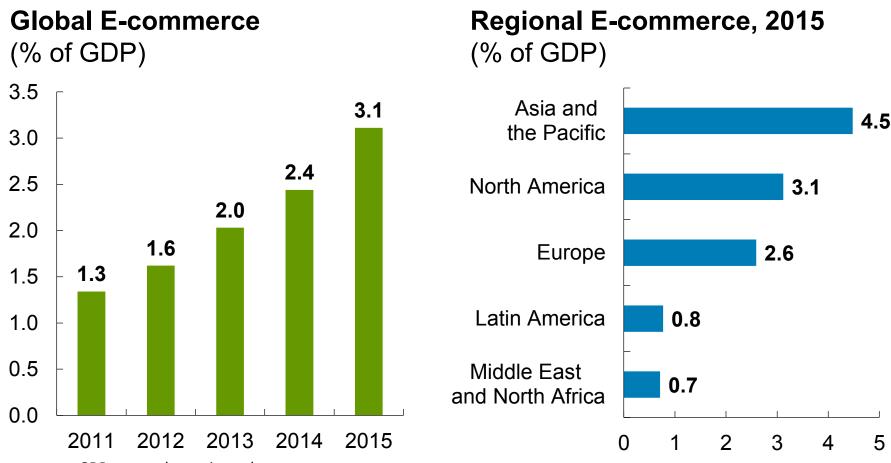


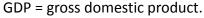
Note: Market size refers to the total goods and services sold through internet retail market. See Box 1.1 for the definition of internet retailing. Asia and the Pacific comprises of Australia; Azerbaijan; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; Malaysia; New Zealand; the People's Republic of China; the Philippines; Singapore; the Republic of Korea; Taipei, China; Thailand; Uzbekistan; and Viet Nam.

Source: Kshetri (2018) using data from Euromonitor International. Passport database.



It is also the largest as % of GDP





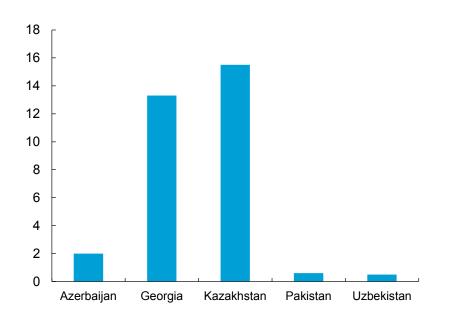
Note: Business-to-Consumer (B2C) e-commerce covers any contract for the sale of goods and/or services, fully or partially concluded by a technique for distance communication. Values refer to the total of goods and services sold through B2C transactions as a percentage of GDP.

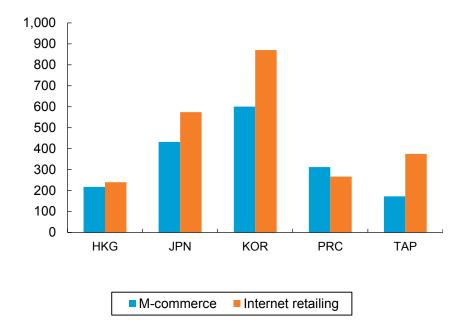


Yet Central Asia lags behind

Internet Retail Spending Per Capita—Central Asia, 2016 (\$)

Internet Retail and M-commerce Spending Per Capita
—East Asia, 2016 (\$)





Source: Kshetri (2018a) using data from Euromonitor International. Passport database.

HKG = Hong Kong, China; JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China; TAP = Taipei, China.

Note: See Box 1.1 for definitions of internet retailing and m-commerce.

Source: Kshetri (2018a) using data from Euromonitor International. Passport database.



Analytical Framework



Factors Affecting the Development of e-marketplace

Economic

- Affordability and access to ICTs
- Bandwidth availability Individual
- Availability of online payment options for e-commerce
- Delivery infrastructures
- Environmental readiness

for e-commerce

Economies of scale

Social Acceptance and Awareness

- Firm level
- Confidence, risk

aversion, and

Legitimacy to

participate in

e-commerce

- Awareness, knowledge
- understanding of e-commerce opportunities

Consumer level

- Awareness and
- inertia knowledge of commerce benefits
 - General and computer literacy
 - English proficiency
 - Trust in e-commerce vendors and postal

services

Perception of

foreian

products/vendors

Legal and Institutional

Normative institutions

- Importance of personal relationships in business
- Roles played by industry bodies and trade/professional associations

Regulative institutions

- Legislative measures related to
 - e-commerce

readiness

E-marketplace

development

- Measures making e-
- commerce affordable and accessible
- Policy initiatives that directly facilitate ecommerce activities
- Public-private

partnership

ICT = information and communications technology rams

Social Legal and Economic Instituti Acceptance and Economic Soc**inal** and Intermedicas environment political norms that that affects environment affect accessibility that plays e-commerceand viability roles in the related behaviors of of evolution of e-commerce individuals the legitimacy activities and of eorganizational decisioncommercemakers related Source: ADB compilation based on Kshetri (2007a, 2018a), North (1996), Parto (2005), Scott (1995, 2001), and World; Bank (2016a).

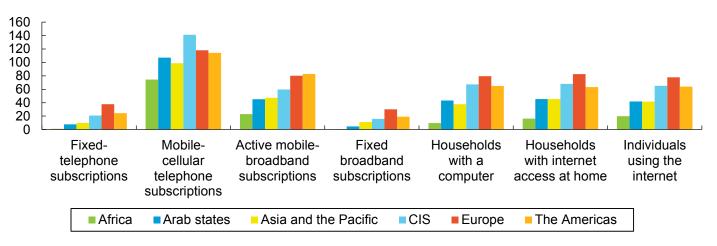


Current Status and Challenges



ICT Infrastructure

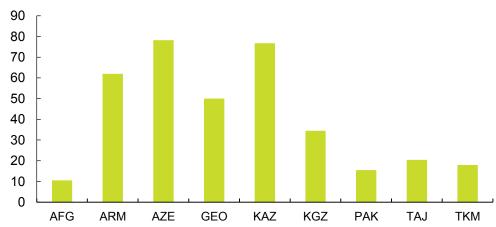
Key ICT Indicators by Region, 2016 (per 100 inhabitants)



Source: International Telecommunication Union. Statistics. https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx

Number of Internet Users—Central Asia, 2016

(% of population)





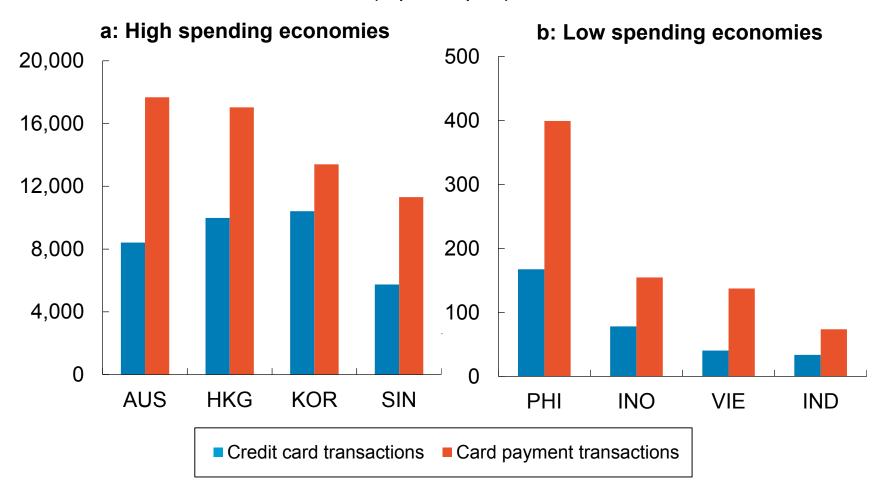
TAJ = Tajikistan, TKM = Turkmenistan.





E-payment

Card Payment Transactions—Selected Asian Economies, 2016 (\$ per capita)

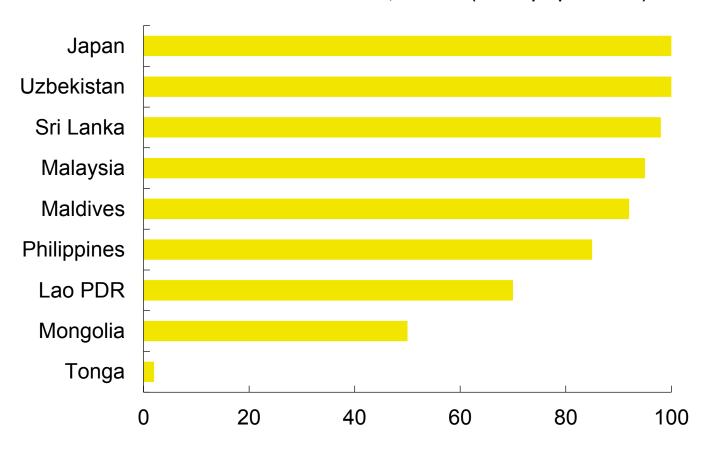




Source: Kshetri (2018a) using data from Euromonitor International. Passport database.

Delivery Infrastructure

Population with Access to Home Mail Delivery— Selected Asian Economies, 2015 (% of population)

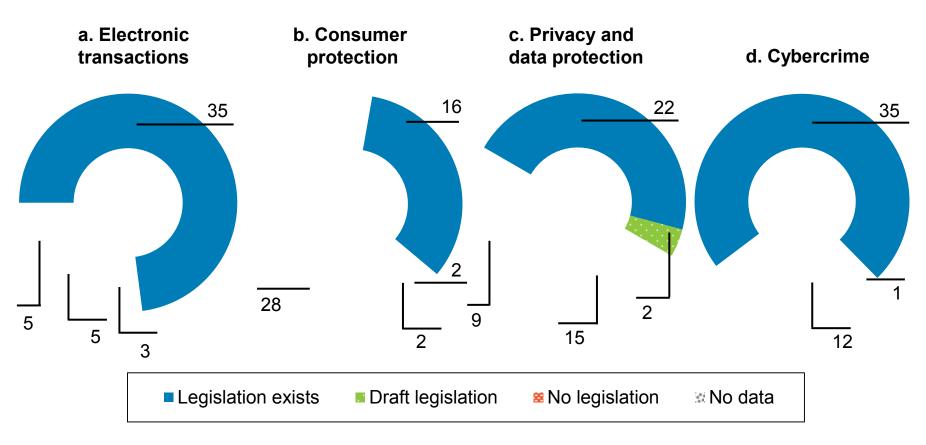


Source: Universal Postal Union. http://www.upu.int/en/ressources/statistiques-postales/resultats-2015.html



Legislation

Status of E-commerce Legislation—Asia and the Pacific, as of December 2017 (Number of economies)



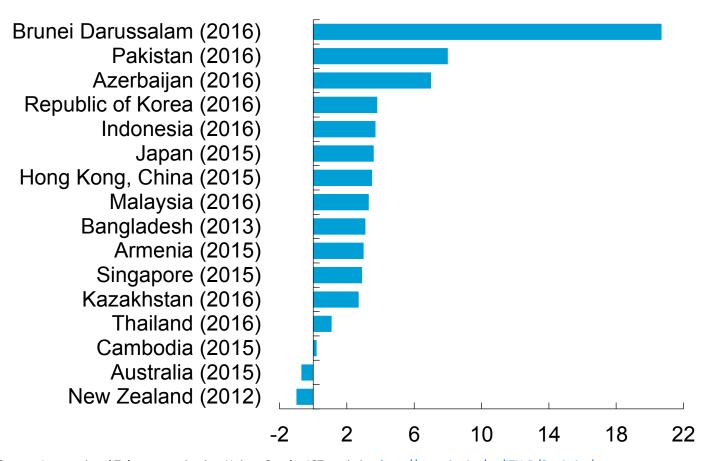
Sources: various international and local sources



Uneven Opportunities: Gender Gap

Gender Gap in Internet Access—Selected Asian Economies

(% of males minus % of females)



Source: International Telecommunication Union. Gender ICT statistics. http://www.itu.int/en/ITU-D/Statistics/ Pages/stat/default.aspx



Key Opportunities



Economic Benefits and Costs of Using E-commerce

Benefits Costs Boosts efficiency and increases gross Requires social and physical capital domestic product investment Allows economies to increase Could lead to transfer pricing and participation in global value chains erosion of tax revenue Increases labor productivity and Potential to widen economic disparity supports job creation, Potential to distort competition entrepreneurship, innovation, and creativity Leads to energy savings and lower carbon emissions Advances inclusive growth (benefitting developing economies, rural areas, women and the elderly, among others)

Source: ADB compilation based on Anvari and Norouzi (2016); Bram and Gorton (2017); Ca' Zorzi (2000); Carnegie Melon University (2009); Cockfield et al. (2013); Hinojosa (2017); Mueller and Shoenmaker (2007); Organisation for Economic Co-operation and Development, United Nations Conference for Trade and Development (UNCTAD), and World Trade Organization (2016); Palsson, Pattersson, and Hiselius (2017); Savrul and Kılıç (2011); UNCTAD (2015, 2017b); and World Bank (2003, 2016b).



Enhancing Inclusiveness

- Rapid growth in internet and mobile phone access
- Developments in e-payment
- Improving logistics-related technologies and infrastructure to benefit the disadvantaged
- E-commerce-enabling technologies in developing countries and LDCs
- Improved access to advanced e-commerce-enabling technologies for SMEs



Emerging Technologies affecting E-Commerce Landscape

Big Data Use in the People's Republic of China to Boost Customer Retention and Spending

Collect data:

- Online shoppers
- Available products
- Purchasing habits of online shoppers



- Identify customer groups
- Use machine learning to decide on product lines and promotions

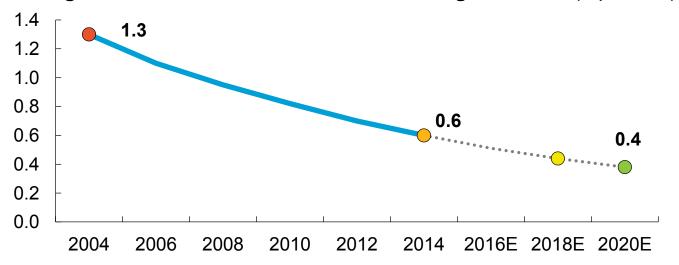


Increase customer retention and spending:

- Segment customer groups
- Target offerings

Source: ADB based on Wang (2016)

Average Sensor Cost for the Internet of Things—Global (\$ per unit)





Source: BI Intelligence (2014)

Emerging Technologies affecting E-Commerce Landscape

Technology	Examples of use	Benefits of combining with 5G
loT	IoT can improve consumer experience, track inventory in real-time and manage more effectively (e.g., JD.com)	5G's faster data-transmission will make it easier to transfer data created by IoT devices.
Al	Al-enabled apps—such as Amazon and Google assistant—can order products online, track orders and perform other e-commerce activities.	5G's faster data-transmission will allow quicker access to additional information and help the Al better understand the environment and context.
Blockchain	Blockchain-based smart contracts can be used by online vendors to automate order fulfillment.	5G can help feed information (e.g., from IoT devices) required for a smart contract more efficiently.
	Blockchains have been used in supply chain management systems and B2B e-commerce (e.g. the PRC's JD.com).	It can also provide better security.
AR/VR	AR enabled apps allow a potential customer to place real products in a virtual setting to provide clear visualization of product use (e.g., Lego and IKEA).	5G network's higher bandwidth, reduced latency and greater uniformity (mobile connection's consistency across locations) allows transmission of complex worlds and sophisticated inputs that require processing of huge amounts of data.

Source: ADB compilation based on Dave (2017), Harbet (2018), IDG (2018), and Xiao (2017).



Way Forward



E-commerce boosts efficiency, enhances market access for businesses and consumers, and generates spillover effects

To unlock the potential of digital trade and e-commerce, it is imperative to take on the following measures:



Enhance affordability of and access to ICT



Institute legal, regulatory and institutional reforms



Improve logistics and delivery infrastructure



Intensify regional efforts to modernize and harmonize regulations



Broaden the epayment availability and options



Fostering Cross-Border E-Commerce

- Global cross-border B2C e-commerce to grow at 27% from 2014 to 2020 to reach almost \$1 trillion.
- Various efforts underway to reduce complex border crossing procedures and regulatory burdens
- National Single Window (NSW)—a one stop-shop to speed up customs clearance
- Automated System for Customs Data (ASYCUDA) system developed by UNCTAD
- New Framework Agreement on the Facilitation of Cross-Border Paperless
 Trade in Asia and the Pacific
- International customs rules for cross-border e-commerce being developed by WCO
- Securing tax revenues while minimizing taxation costs are crucial



Creating a Virtuous Cycle in E-marketplace Development

