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Economic Cooperation**

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Session: 1

E-Commerce: A Driver of Digital Innovation

Submitted by: Korea



**Free Trade Area of Asia-Pacific Capacity
Building Workshop on E-Commerce Elements
in Free Trade Agreements and Regional Trade
Agreements
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17-18 September 2019**

APEC FTAAP Capacity Building Workshop on E-commerce
Elements in FTAs/RTAs (Seoul, Korea)

E-COMMERCE: A DRIVER OF DIGITAL INNOVATION

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- 2. E-commerce in Asia and the Pacific**
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1. Concept of E-commerce

General definition of e-commerce

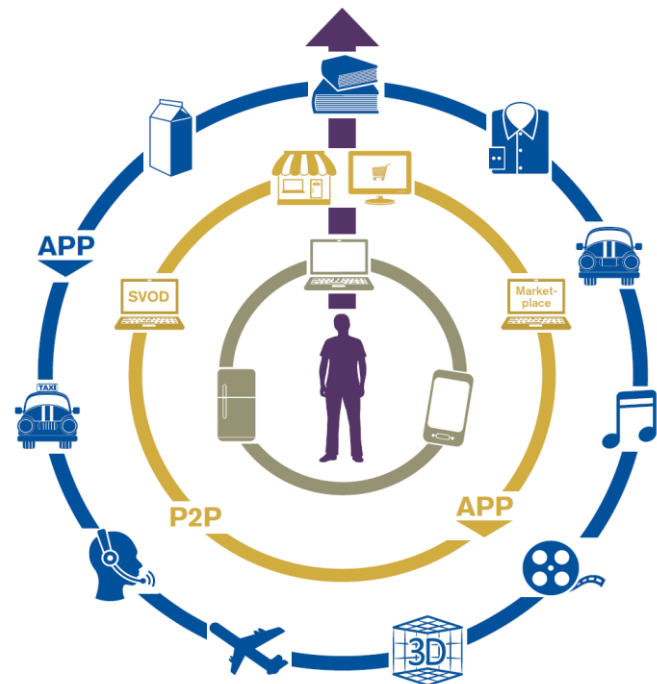
- **OECD(2009)**

- “The sale or purchase of goods or services conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders... the payment and the ultimate delivery... do not have to be conducted online.”
- Who is involved?: enterprises, households or individuals, governments, and other public or private organisations

- **How is e-commerce conducted?**

- **Electronic devices:** desktops, tablets, smartphones and things
- **Wide range of platforms:** online market places, mobile apps, P2P platforms, etc.
- **Wide range of goods and services:** from traditional consumer goods to music, films, games, flight tickets, maps, car rental, car sharing, etc.
- **Enablers:** connectivity through internet

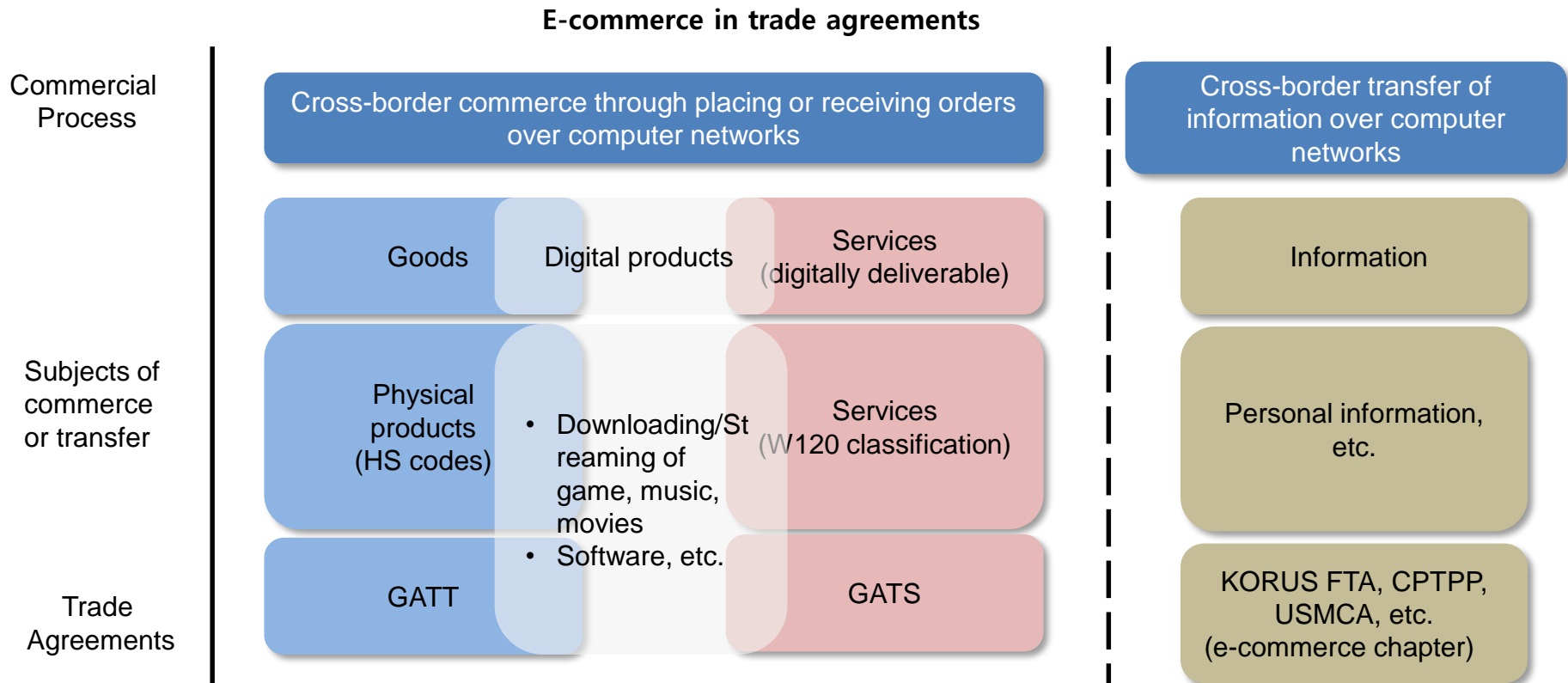
Conceptual picture of e-commerce



Source: Kommerscollegium(2015)

E-commerce in the context of FTAs/RTAs

- **Scope of e-commerce chapters in trade agreements**
 - Fill loopholes(grey areas) in GATT and GATS: concept of ‘digital products’
 - Regulations on data/consumer protection and cross border flows of data
 - Trade facilitation elements: regulations on e-trade, etc.



E-commerce as a driver of digital innovation

- **E-commerce is about...**

- Innovation in international commerce of all kinds of goods and services traded based on online networks.
- Innovation in entire sectors or fields based upon hyper-connectivity, platforms and data.

Examples of U.S. Platform Companies

U B E R

Connecting drivers and passengers

amazon

Connecting buyers and sellers

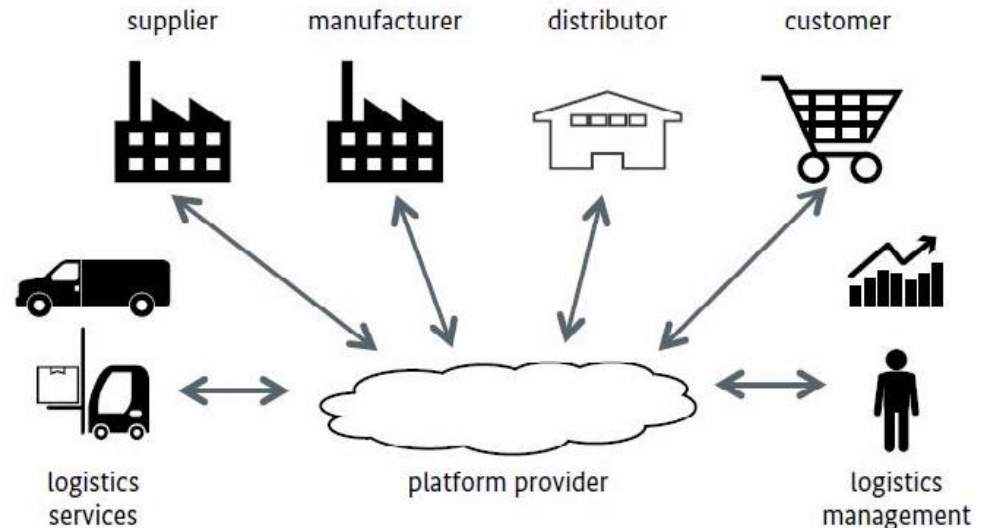
airbnb

Connecting homestays and tourists

Google play

Connecting app developers and mobile users

A Scenario of Industrie 4.0: Self-organizing Adaptive Network



Source: BMWi(2016).

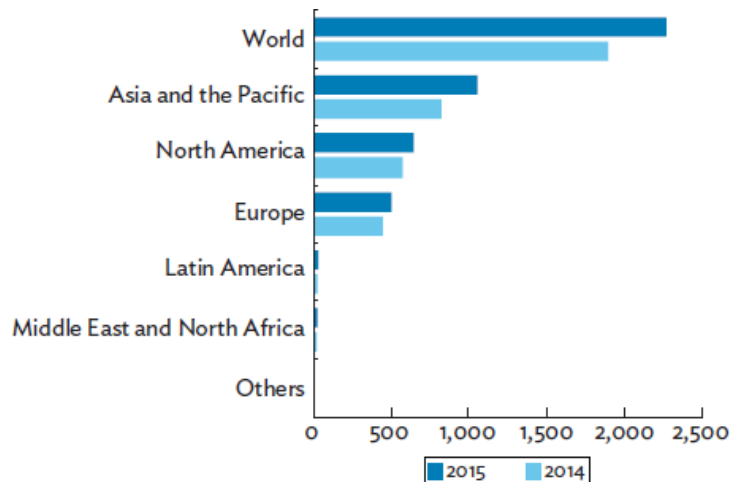
2. E-commerce in Asia and the Pacific

E-commerce market in Asia and the Pacific

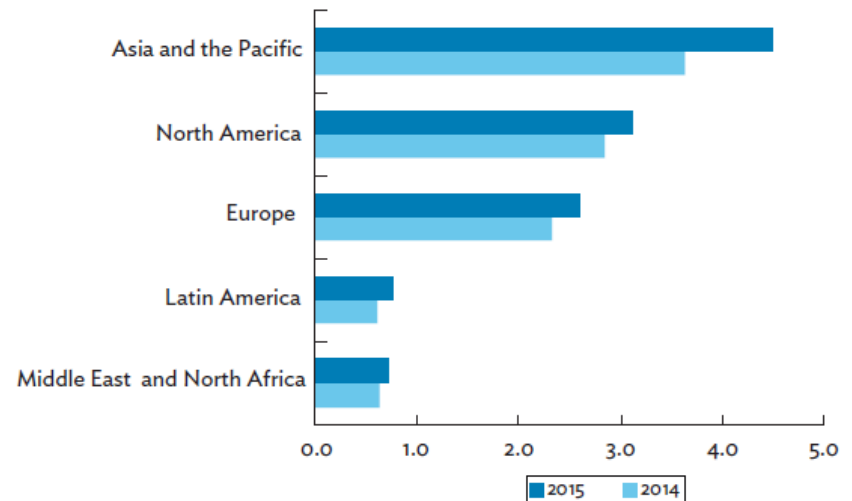
- **Total B2C market**

- The Asia-Pacific region holds the largest share.
 - over \$1 trillion of the \$2.3 trillion global e-commerce total in 2015
- It also had the fastest e-commerce growth rate 28%, compared with the global growth rate of 20%
- By the end of 2015, the size of e-commerce relative to GDP was 4.5% in Asia and the Pacific.

Size of B2C E-commerce by Region(US\$ billion)



Size of B2C E-commerce by Region(% of GDP)



Notes: 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.

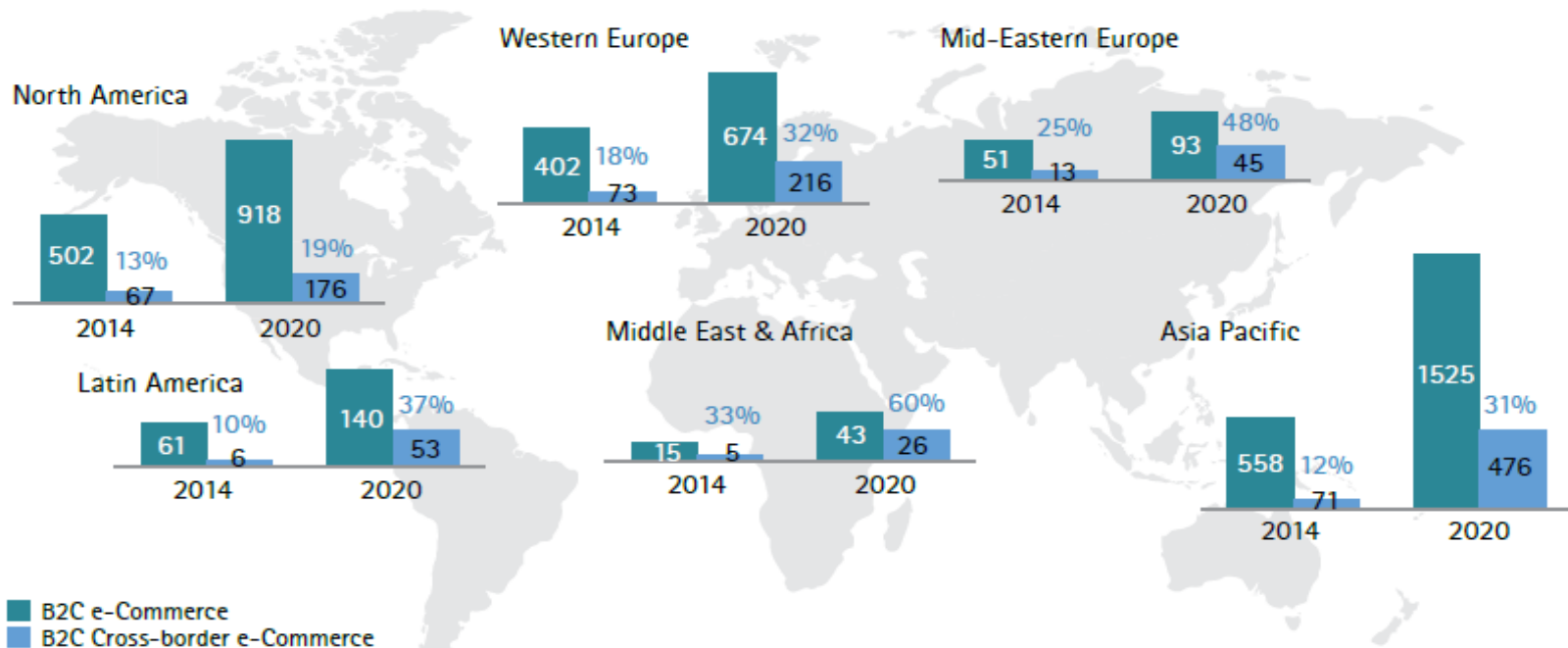
Source: Ecommerce Foundation(2016); UNESCAP and ADB(2018)

E-commerce market in Asia and the Pacific

- **Cross-border B2C market**

- Asia-Pacific region leads the growth of global cross-border e-commerce.
- (e.g.) Cross-border transactions comprise about 40% of all Southeast Asia's e-commerce.
- Cross-border e-commerce in Asia-Pacific is expected to grow faster than domestic e-commerce.

Cross-border B2C E-commerce Transaction Value(US\$ billion)



■ B2C e-Commerce
■ B2C Cross-border e-Commerce

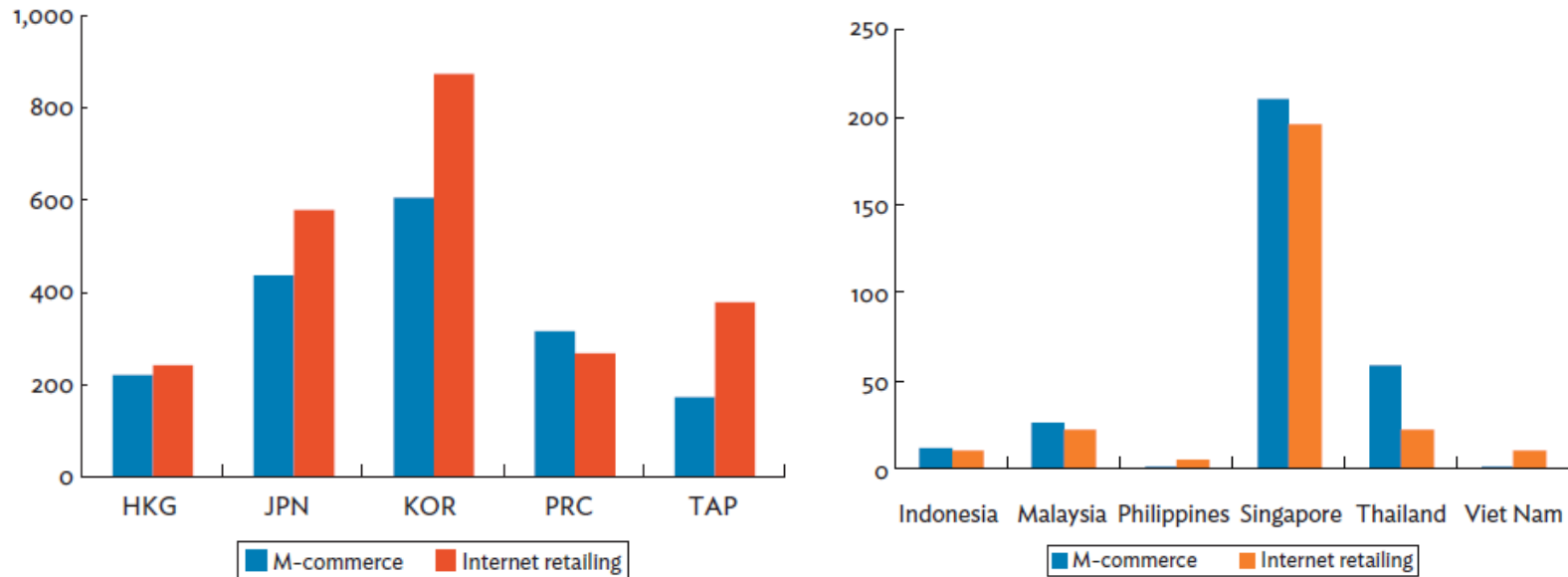
Source: Accenture(2016)

E-commerce market in Asia and the Pacific

- **B2C market by sub-region and country**

- East Asia: The PRC is the largest e-commerce market globally.
 - Korea is Asia's third-largest retail e-commerce market, and seventh worldwide(eMarketer)
- Southeast Asia: As of 2017, 3% of the 560 million people had shopped online(Wenyu 2017).

**Internet Retail and M-commerce Spending
Per Capita: East Asia(left) and Southeast Asia(right), 2016[\$]**



Source: UNESCAP and ADB(2018)

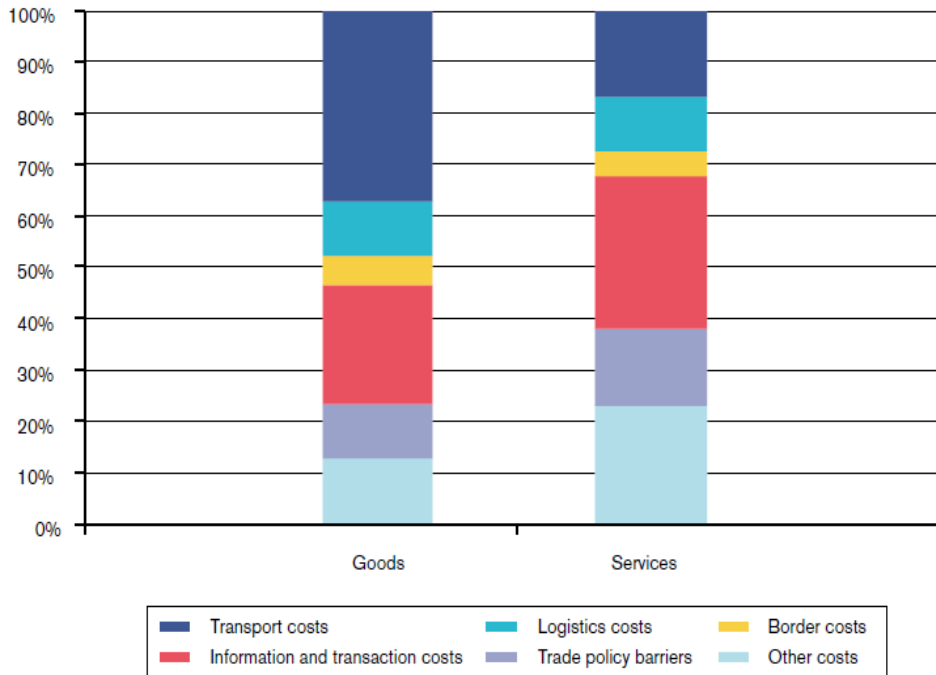


3. Benefits of E-commerce

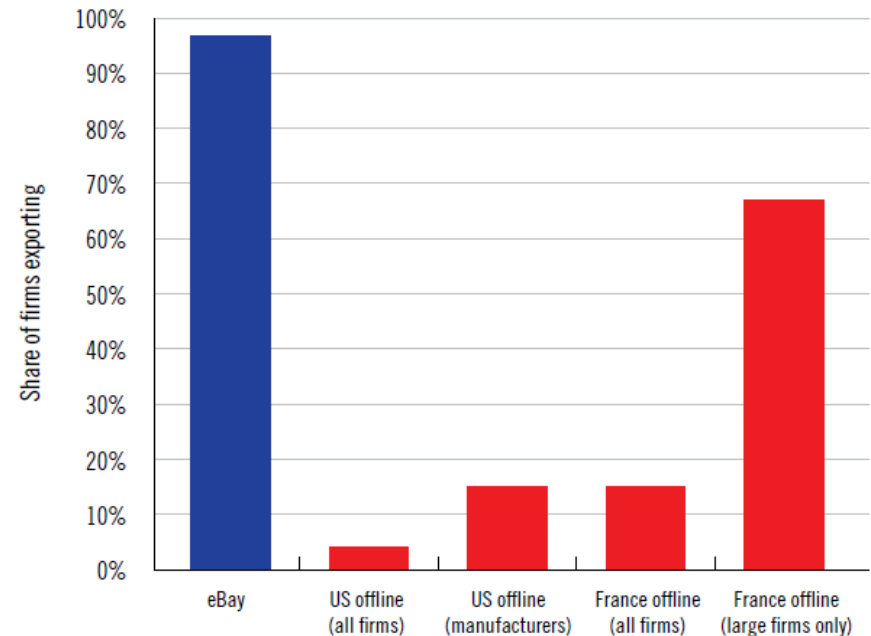
Benefits of E-commerce: Exports

- **E-commerce can provide substantial export opportunities.**
 - Reduction of firms' operational costs
 - Opportunities for innovation and new forms of businesses
 - Wider market scope due to reduction in transaction costs
 - Small and medium enterprises(SMEs) could be big beneficiaries.

Trade costs breakdown (percent)



Share of sellers exporting: ebay vs. offline, %



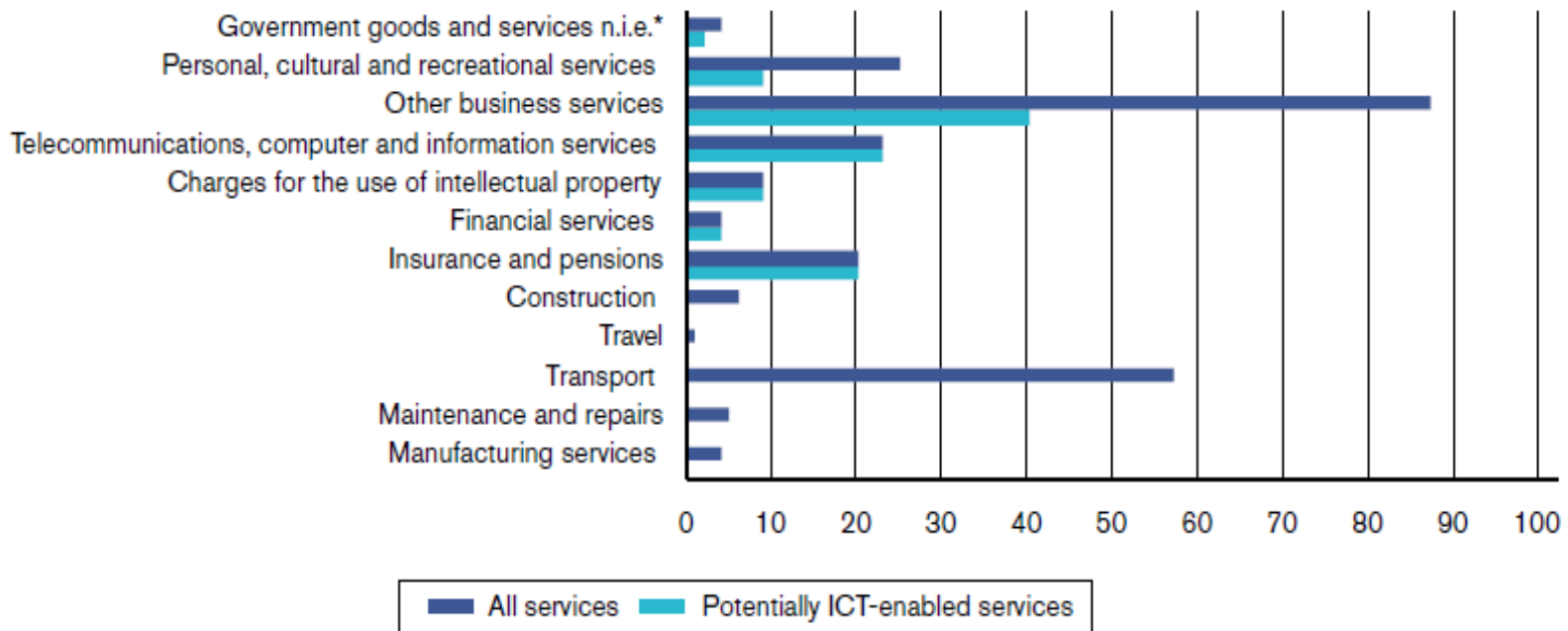
Source: ebay inc.

Source: WTO(2018)

Benefits of E-commerce: Exports

- **E-commerce can promote some services exports.**
 - Some services are now tradable across borders through innovative business models that leverage digital technology.
 - The share of trade in digitally deliverable services is growing from 46% to 52% during 2005-2016(WTO 2018).

Approximation of potentially ICT-enabled services by sector (percent)



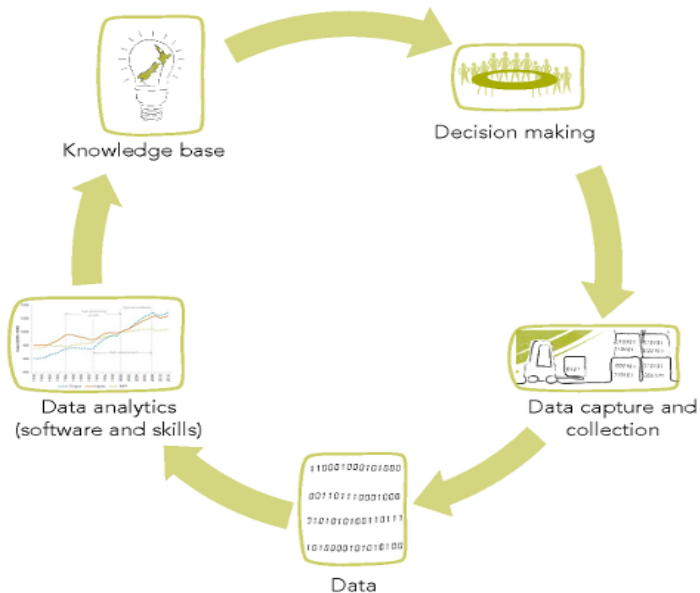
Benefits of E-commerce: Exports, A Case of Korea

- **Korea is world's 7th largest retail e-commerce market.**
 - Market size is around \$ 44 bil. in 2017, 11% of total domestic retail sales.
 - E-commerce market grows fast around 10% per annum (eMarketer).
- **Cross-border e-commerce export increases dramatically.**
 - (2015) \$154 mil. → (2016) \$262 mil. (Korea Customs)
- **Positive relationship between e-commerce and productivity**
 - Productivity of Korean firms operating e-commerce is higher than those who do not (both in manufacturing and services. Lee 2017).
- **SMEs' participation in cross-border e-commerce increases very fast.**
 - Korean SMEs' e-commerce export volume increases 47% between 2015 and 2016. (Korea Customs)
- **Export prices of consumer goods decrease.**
 - Average export price of consumer goods per unit decreases from \$ 311 to \$181 during 2014-16.

Benefits of E-commerce: Data-driven Innovation

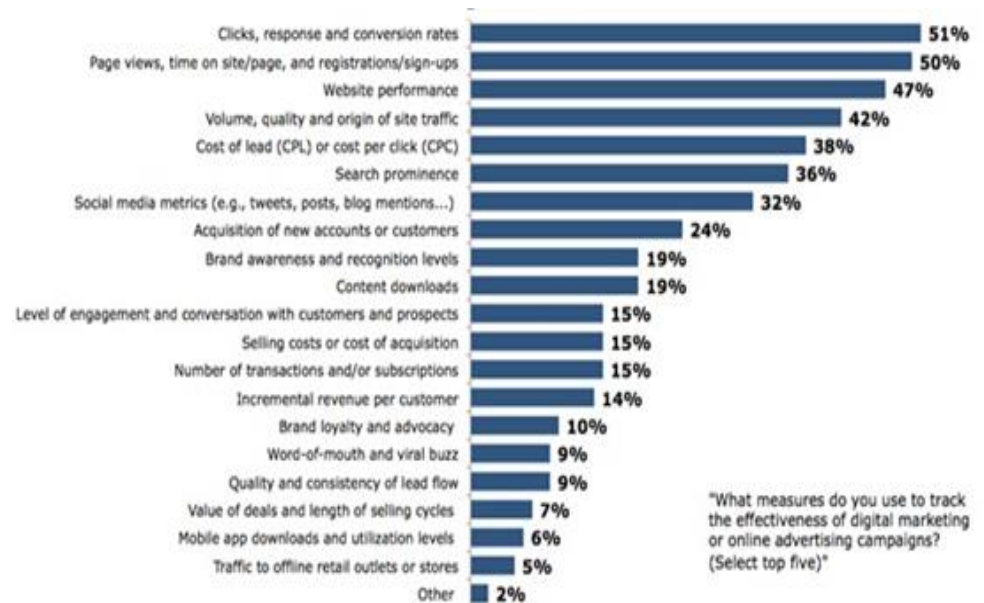
- **Data** collection and analyses are **the source of unpredictable innovation**.
 - Platform is a main driver of data-driven innovation.
- Data as firms' and national **“infrastructural resource”**(OECD)
 - Platform → data accumulation → analysis → decision making → innovation
 - Customized and personalized services is the ultimate goal of e-commerce.

The Data Value Cycle



Source: OECD(2014)

Data Use: Example of Marketing



“What measures do you use to track the effectiveness of digital marketing or online advertising campaigns? (Select top five)”

Source: CMO Council



4. Challenges

Challenges: Promoting E-commerce

Building Grounds of digital innovation

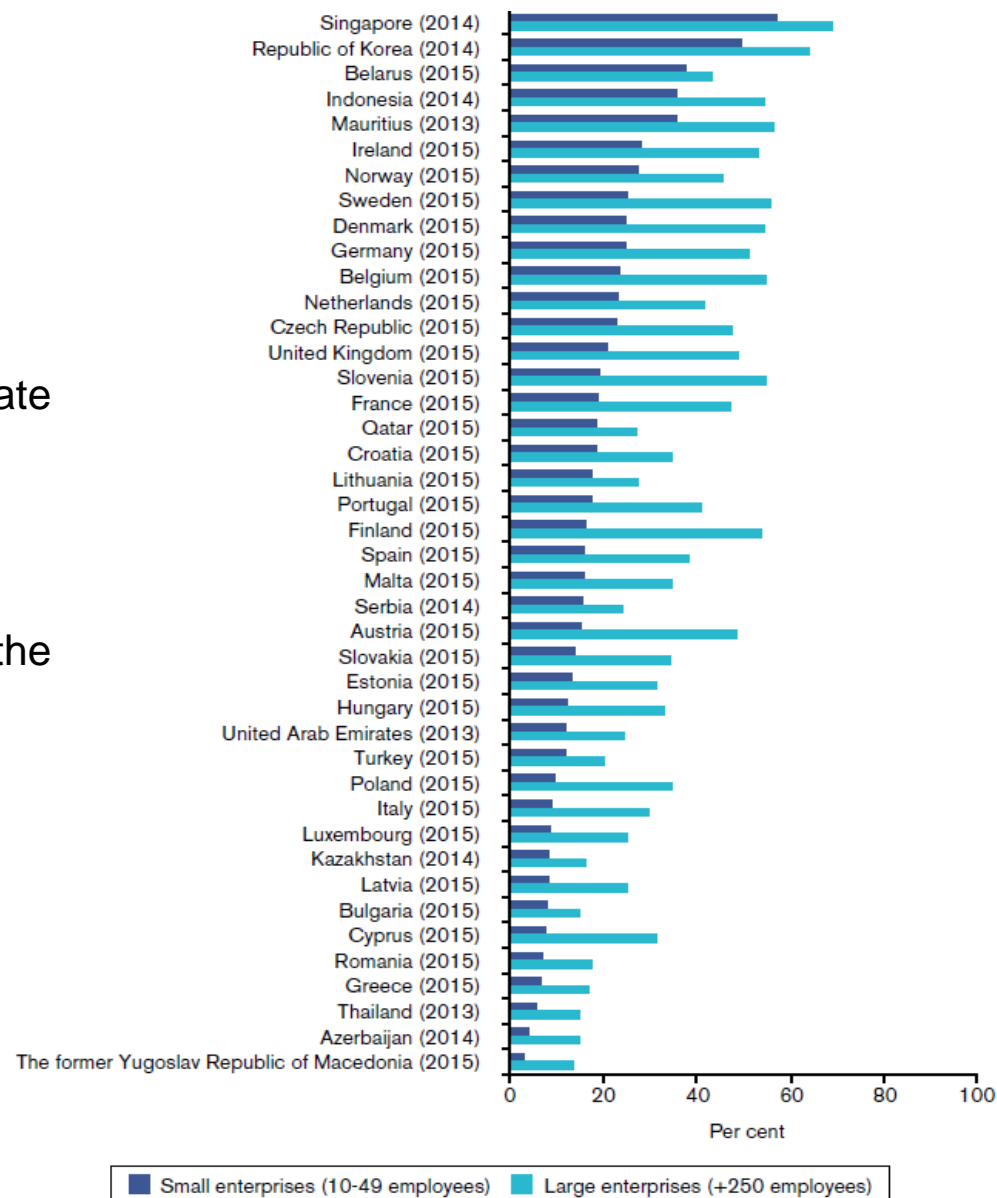
- Solid ICT infrastructure, ICT access and use
- Physical infrastructure such as logistics
- Digital skills
- Digital security → trust between buyers and sellers
- Use of financial and e-payment systems
- SMEs' participation in cross-border e-commerce: e.g. helping access to qualified e-commerce platform and logistics providers
- Innovation ecosystem focusing on startups, etc.

Challenges: Promoting E-commerce

Proportion of small and big firms selling online, 2013-15 (percent)

Source: UNCTAD(2017)

- The likelihood that a firm will participate in the digital economy increases with firm size.
- Big firms seem to be adequately prepared to participate effectively in the digital economy.



Challenges: Improving regulatory condition

Adapting regulatory frameworks to innovation in e-commerce

- Balancing freer cross-border flows and protection of data
 - Cross-border flows of data are becoming essential condition of businesses.
 - Adequate system of data protection is also a necessary for business activities as well as consumers.
- There are plenty of issues where int'l cooperation is effective.
 - Internationally compatible(interoperable) regulations
 - Data Protection over the Internet(ex. APEC's CBPR)
 - Online consumer protection
 - Customs regulations
 - Online IPRs, etc.



// Thank you