



E-COMMERCE EVOLUTION IN ASIA AND THE PACIFIC

Opportunities and Challenges

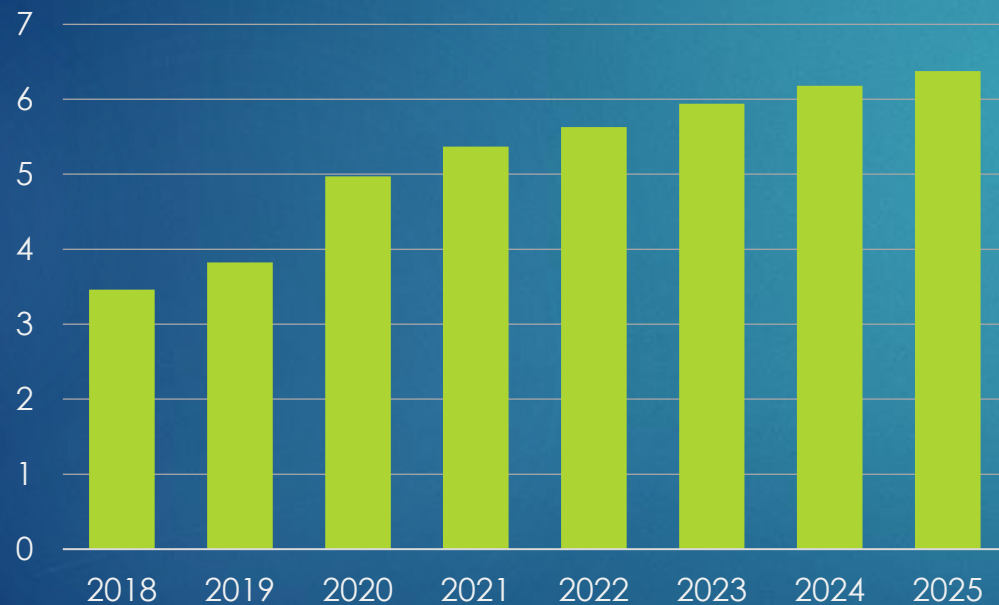
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Asian Development Bank

Central Asian Governments and Private Sector E-Commerce Study Tour
Singapore | 18 May 2023

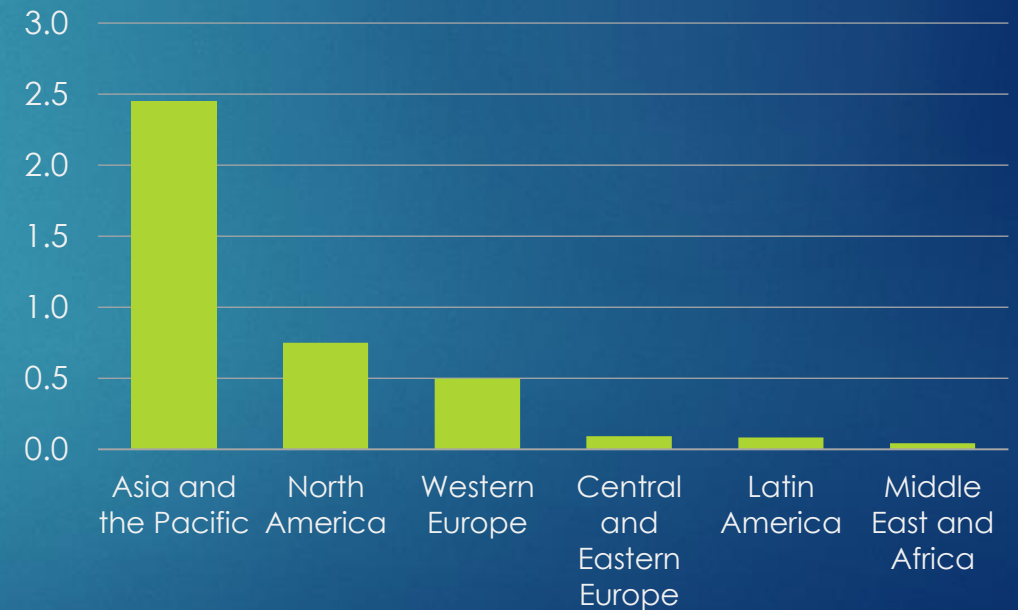
Global e-commerce sales continue to grow, led by Asian economies

Global Retail E-commerce Sales
(% of GDP)



Source: Statista and IIMF World Economic Outlook Database.

Global E-commerce Sales 2020 Estimate
(\$ trillion)



Source: eMarketer. *Global Ecommerce 2020*.

Variations in e-commerce development persist across Asia

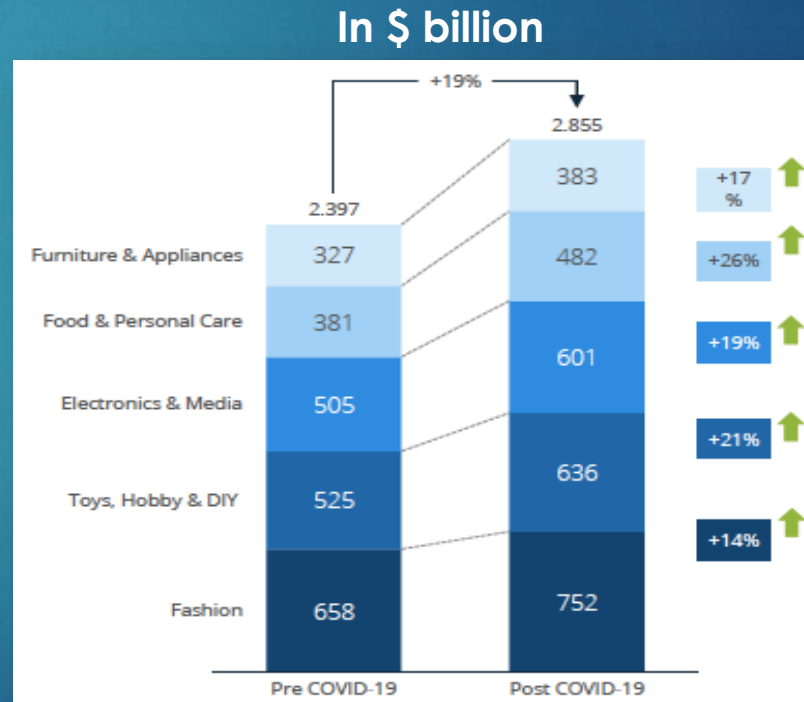
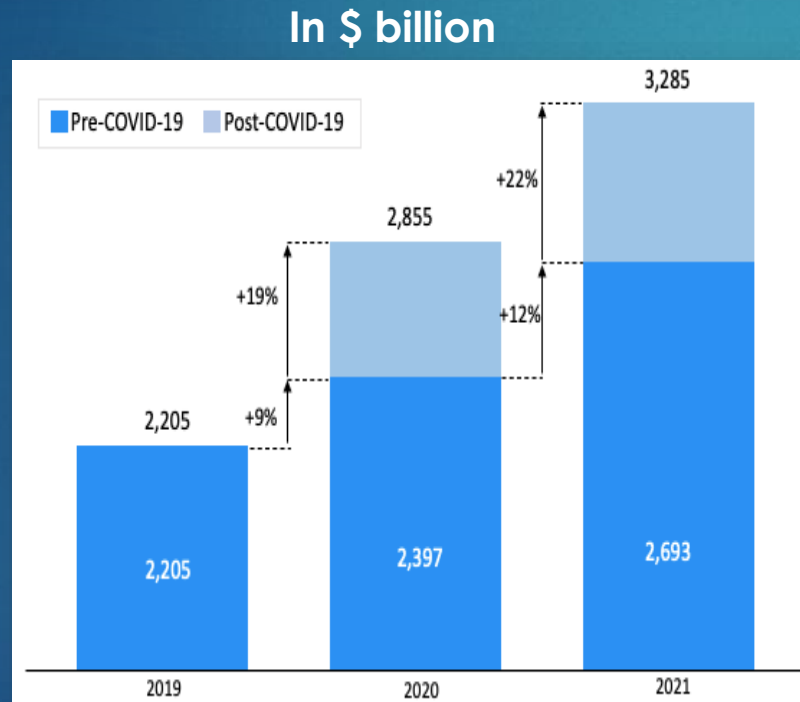
E-commerce B2C Readiness Score—Selected Asian Economies, 2020

Global Rank	Economy	Score	Global Rank	Economy	Score
4	Singapore	94.4	63	Viet Nam	61.6
10	Hong Kong, China	91.8	71	India	57.1
11	New Zealand	91.8	83	Indonesia	50.1
16	Australia	90.6	96	Philippines	44.7
18	Korea, Republic of	89.8	113	Nepal	34.3
20	Japan	88.7	114	Bhutan	33.6
30	Malaysia	81.3	115	Bangladesh	33.3
42	Thailand	76.0	116	Pakistan	32.5
55	China, People's Republic of	70.1	117	Cambodia	31.1
61	Mongolia	65.0			

Source: United Nations Conference on Trade and Development. 2020. The UNCTAD B2C E-Commerce Index 2020.

The COVID-19 pandemic has spurred the growth of e-commerce

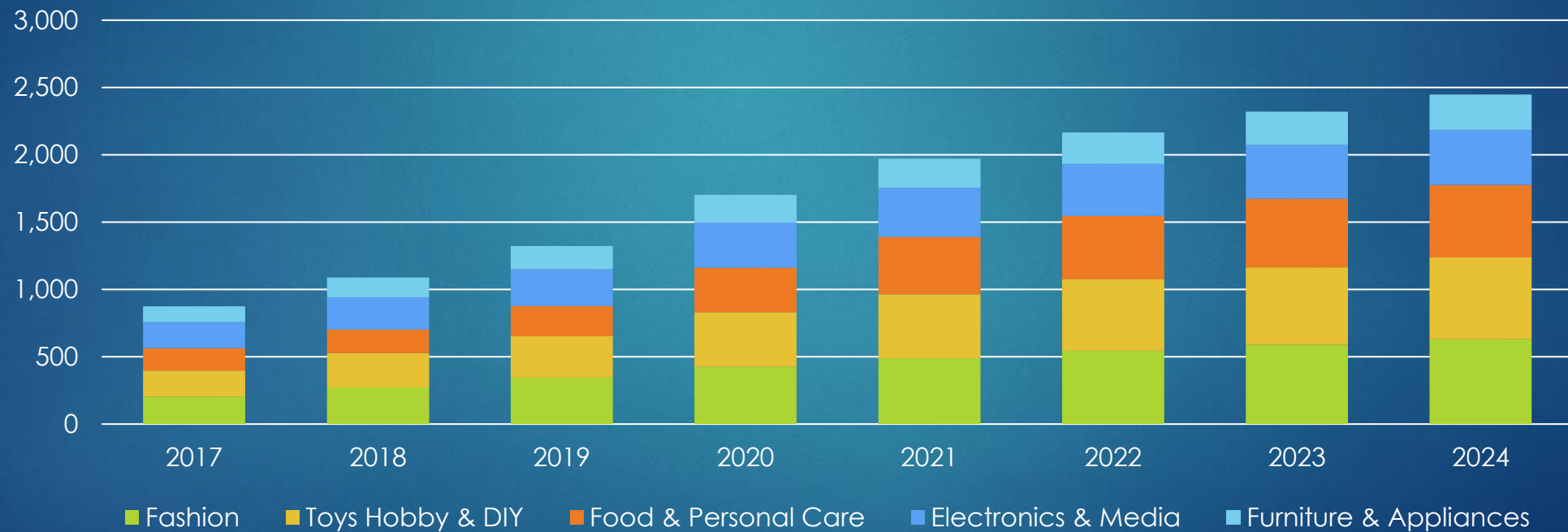
Increase in Global E-commerce Revenue Growth Due to COVID-19



Note: Green arrows signify positive growth.
 Source: Statista. 2021. *Statista Digital Market Outlook*.

Food & personal care is the fastest growing e-commerce market in Asia

E-commerce Revenues in Asia and the Pacific, by Segment
(\$ billion)



Source: Statista. 2021. E-commerce in the Asia-Pacific Region.

Wide heterogeneity in e-commerce capacity

Average B2C Index Values of LDCs versus Other Groups of Economies, 2015–2020



Source: United Nations Conference on Trade and Development, 2022. *E-commerce and the Digital Economy in LDCs: At Breaking Point in COVID-19 Times*.

Widening digital divide: Vulnerable groups

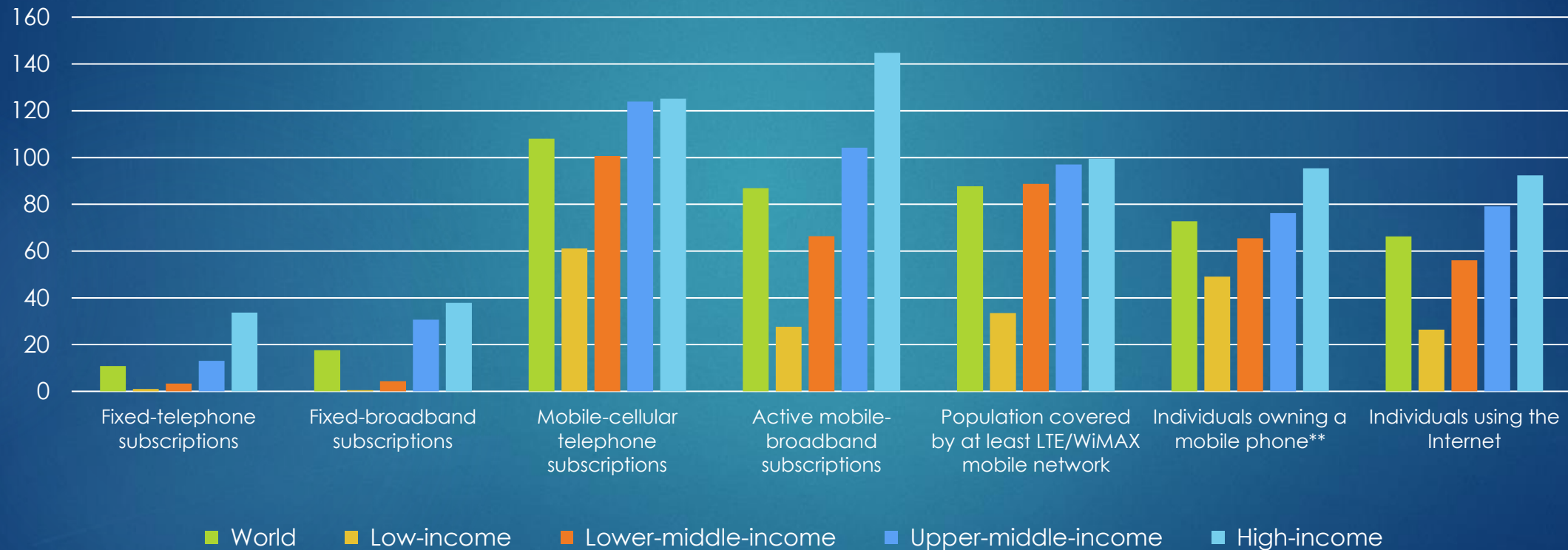
- ▶ Least developed countries
- ▶ Micro, small, and medium-sized enterprises (MSMEs)
- ▶ Women
- ▶ Rural markets
- ▶ Digital discrimination



PREREQUISITES OF E-COMMERCE DEVELOPMENT

Accessibility of internet

Key ICT Indicators by Income Group, 2022
(per 100 people)



Notes: List of developed and developing countries is based on United Nations M-49 Standard.
Source: International Telecommunication Union. ITU World Telecommunication ICT Indicators database.

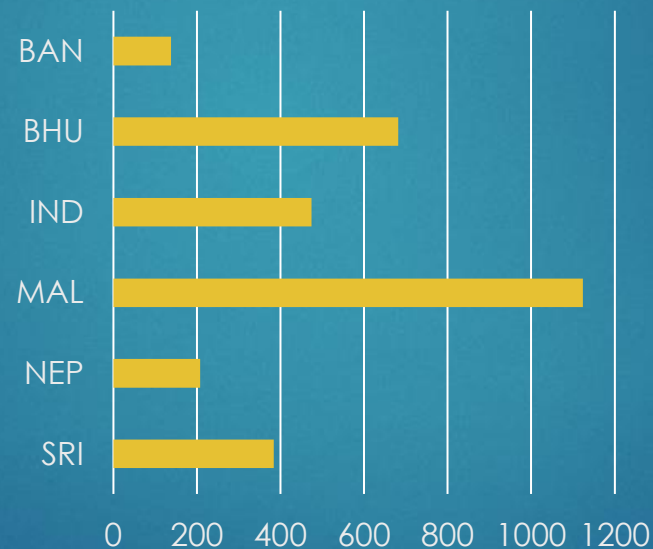
Availability of secure internet servers

Secure Internet Servers, 2020 (per million people)

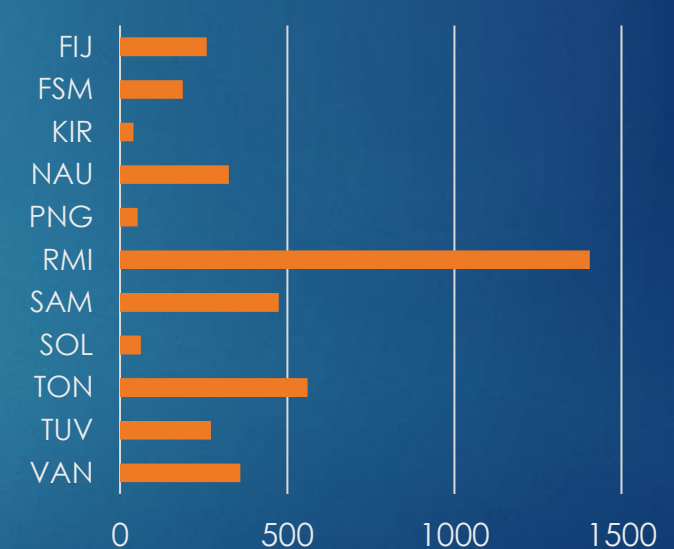
a) Central and West Asia



b) South Asia



c) The Pacific

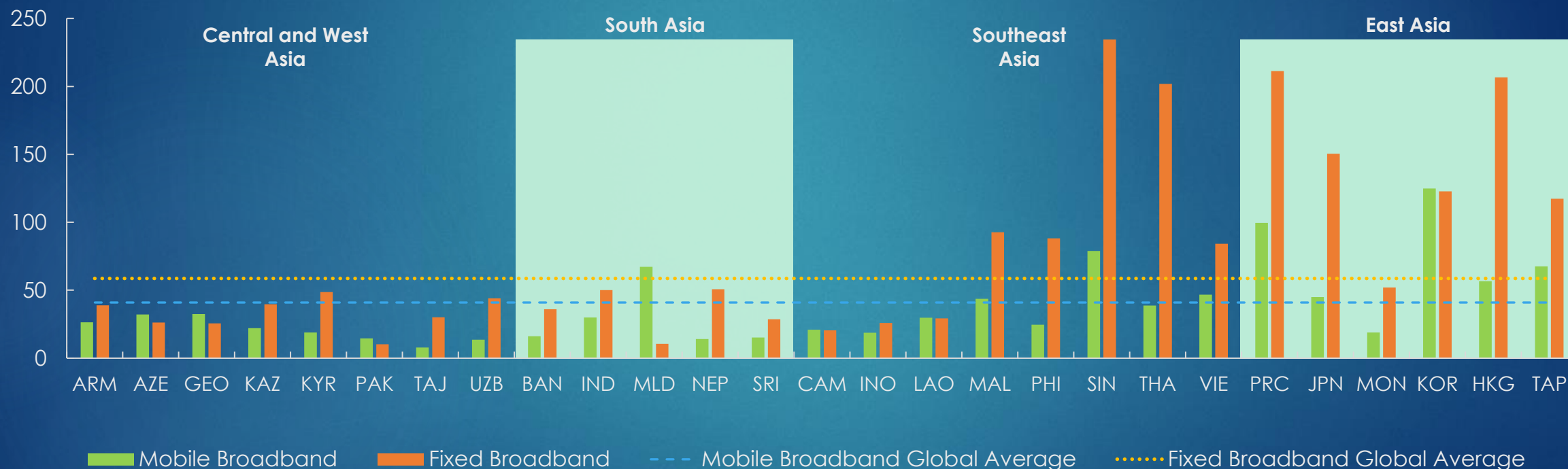


ARM = Armenia, AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, FIJ = Fiji, GEO = Georgia, IND = India, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, KIR = Kiribati, MLD = Maldives, NEP = Nepal, PAL = Palau, PNG = Papua New Guinea, RMI = Republic of the Marshall Islands, SAM = Samoa, SOL = Solomon Islands, SRI = Sri Lanka, TAJ, Tajikistan, TKM = Turkmenistan, TON = Tonga, UZB = Uzbekistan, VAN = Vanuatu.

Source: World Bank. World Development Indicators.

Broadband speed

Mobile and Fixed Broadband Speed, January 2023
(megabits per second, based on download speed)



ARM = Armenia; AZE = Azerbaijan; GEO = Georgia; KAZ = Kazakhstan; KGZ = Kyrgyz Republic; PAK = Pakistan; TAJ = Tajikistan; BAN = Bangladesh; IND = India; MLD = Maldives; NEP = Nepal; SRI = Sri Lanka; CAM = Cambodia; INO = Indonesia; LAO = Lao People's Democratic Republic; MAL = Malaysia; PHI = Philippines; SIN = Singapore; THA = Thailand; VIE = Viet Nam; PRC = People's Republic of China; JPN = Japan; MON = Mongolia; KOR = Republic of Korea; HKG = Hong Kong, China; TAP = Taipei, China.
Source: Speedtest. Speedtest Global Index January 2023.

Reliability of e-payment options

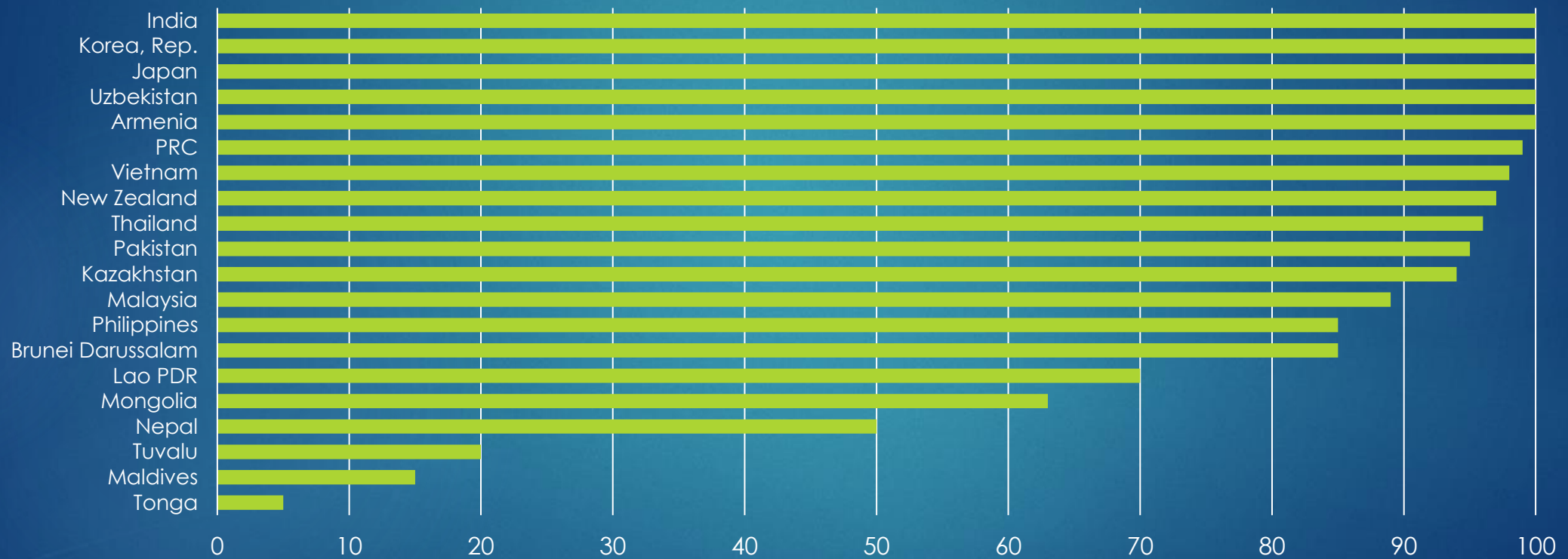
Share of Payment Methods in E-commerce Transactions by Region (% of transaction volume)

	Worldwide	North America	Latin America	Europe, and Middle East and Africa	Asia and the Pacific
Digital/mobile wallet	41.8	23.7	13.8	24.6	58.4
Credit card	24.2	34.4	43.8	19.7	20.1
Debit card	10.6	17.6	11.9	18.2	4.2
Bank transfer	9.0	5.9	10.9	16.3	7.6
Charge & deferred debit card	5.0	10.5	3.5	6.7	1.3
Cash on delivery	4.5	3.2	5.8	4.7	5.1
Buy now pay later	1.6	0.9	0.0	5.8	0.3
PostPay	1.3	1.0	7.9	0.0	1.6
Pre-paid card	1.0	0.9	1.3	1.3	1.0
PrePay	0.6	0.9	0.6	1.3	0.3
Other	0.6	1.0	0.6	1.5	0.1

Source: WorldPay Global Payments Report 2020.

Logistics and delivery infrastructure

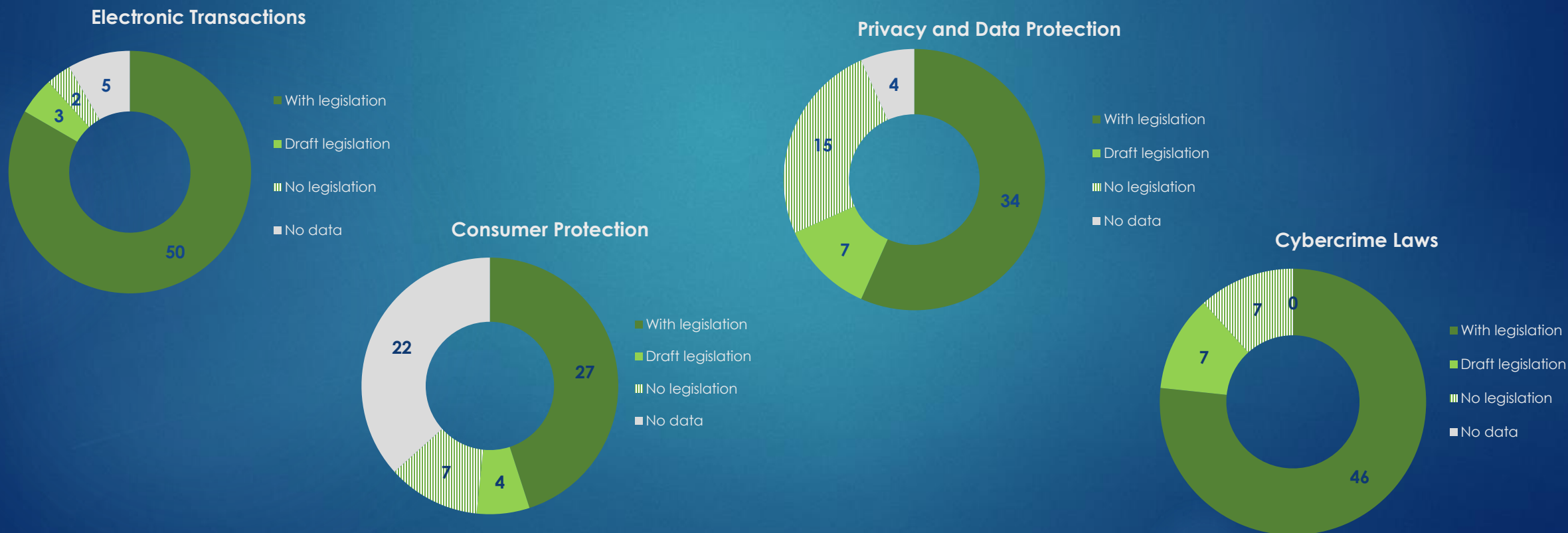
Population with Access to Home Mail Delivery—Selected Asian Economies, 2019
(% of population)



Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.
Sources: GovData360, World Bank.

Appropriate legislative and regulatory mechanism

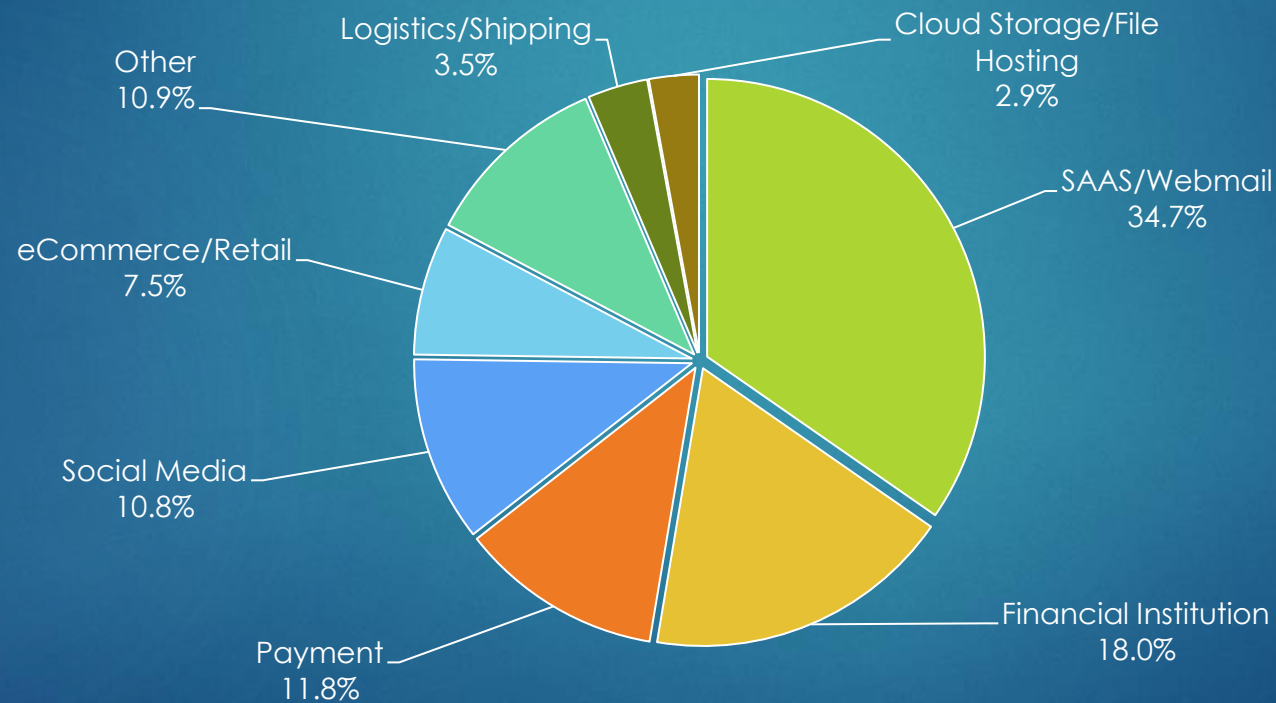
Status of E-Commerce Legislation—Asia and the Pacific, September 2022
(number of economies)



Source: United Nations Conference on Trade and Development. Summary of Adoption of E-Commerce Legislation Worldwide.

Enforcement of data protection and cybersecurity measures

Most-Targeted Industry Sectors by Phishing Attacks, Q2 2020
(% of industries attacked)



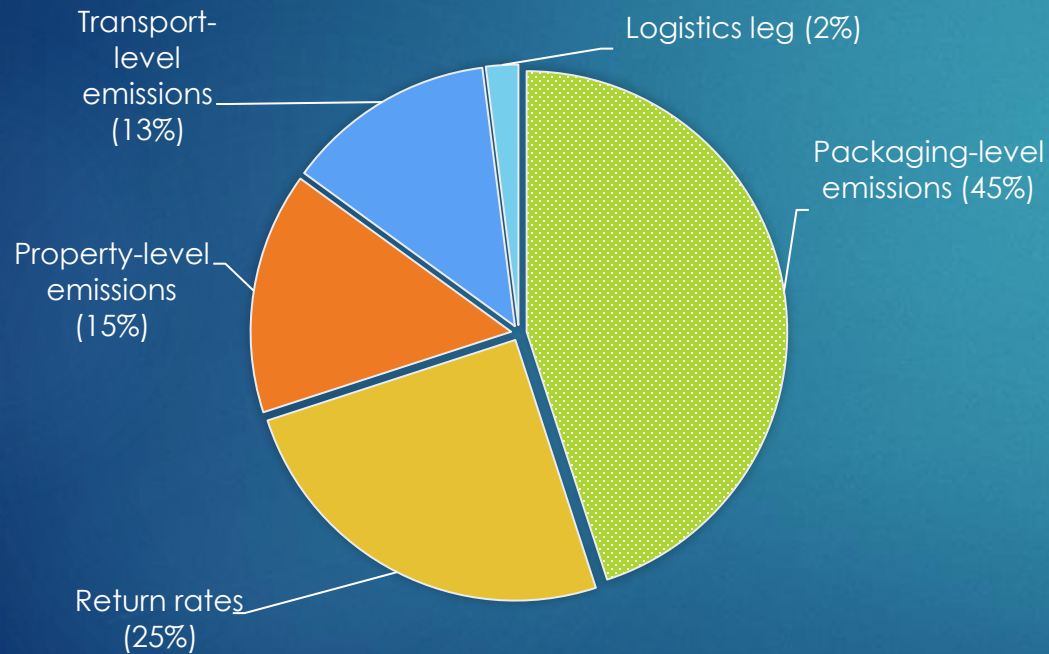
Source: Anti-Phishing Working Group Phishing Activity Trends Report Q2 2020.

ENVIRONMENTAL IMPACT OF E-COMMERCE



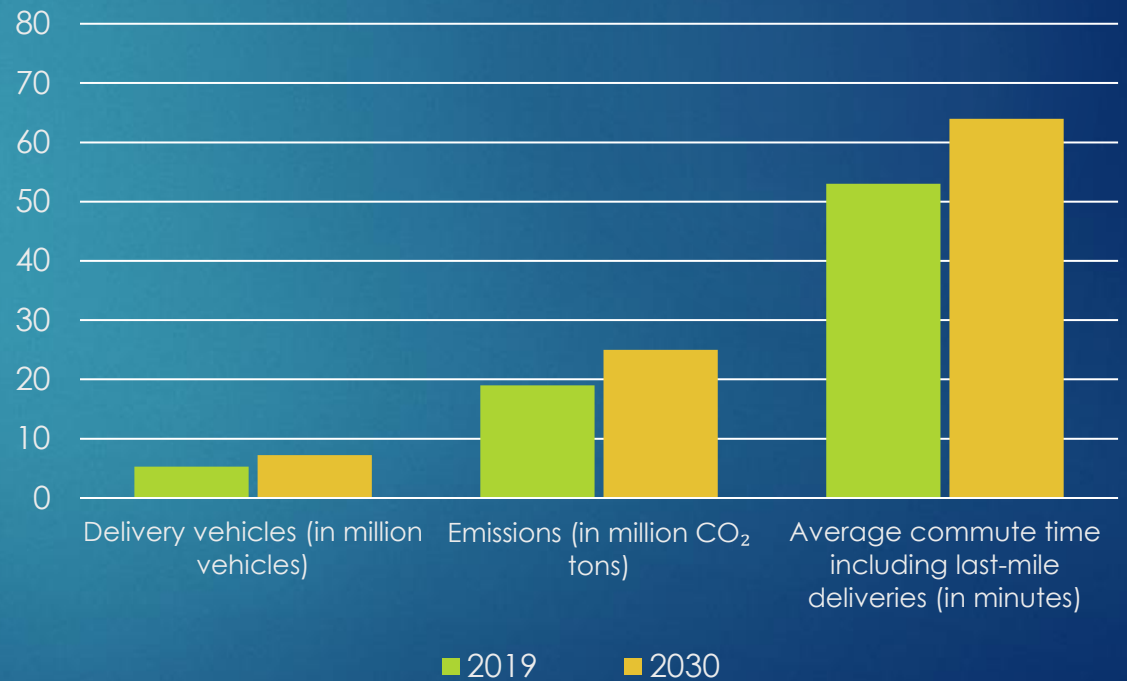
E-commerce is expected to emit significant amounts of GHG emissions

Breakdown of Estimated E-commerce Greenhouse Gas Emissions, by Source (as of 2020)



Source: Statista.

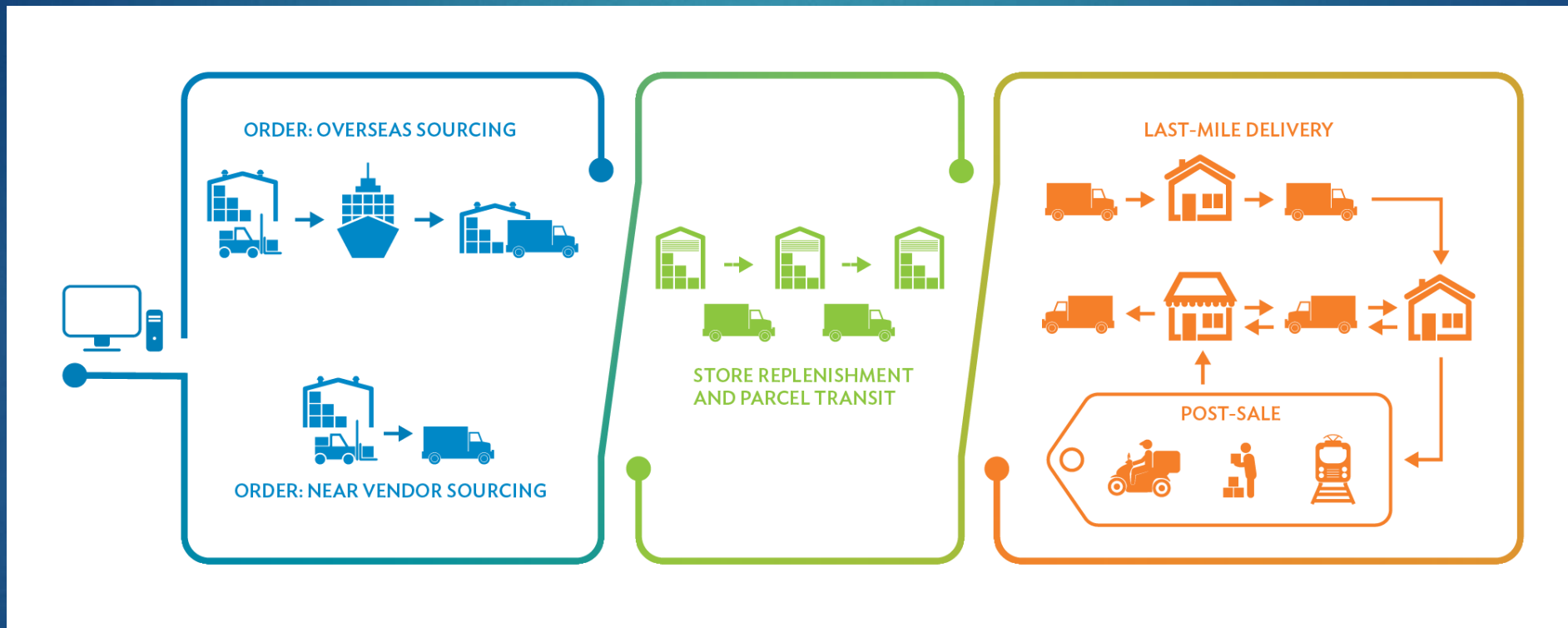
Environmental Impact of E-commerce Logistics Worldwide, by Indicator



Source: Statista.

General operations involved in a single order to an e-commerce platform

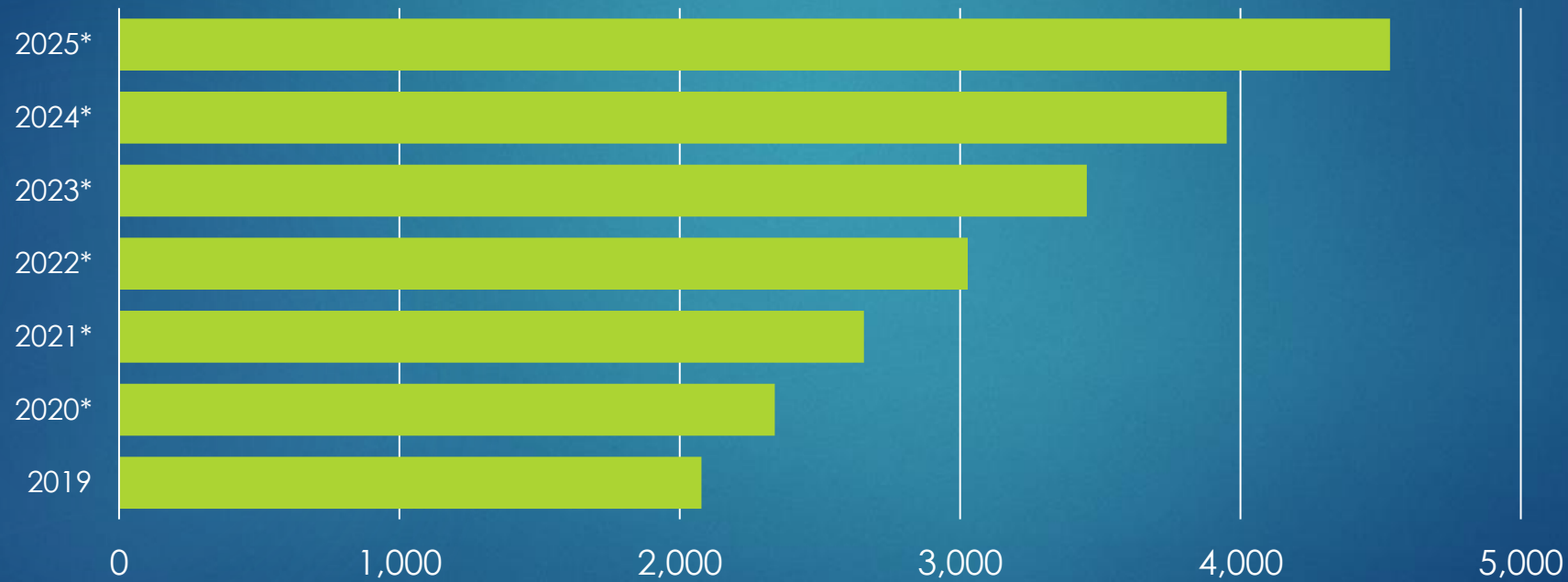
E-commerce Supply Chain Coverage



Source: ADB based on various sources.

Packaging wastes increasing rapidly

Estimated Annual E-commerce Plastic Packaging Use
(millions of pounds)



Source: Statista. Plastic Rubber. Estimated annual E-commerce plastic packaging use in 2019 with projections to 2025.

Possible solutions to bring down carbon emissions in e-commerce

- ▶ Alternative delivery systems
- ▶ Sustainable delivery transport
- ▶ Common warehouse management
- ▶ Recycling and sustainable packaging
- ▶ Incentives for environment-friendly packaging
- ▶ Volume-rate garbage disposal and separate collection of packaging wastes



COMPETITION POLICY FOR E-COMMERCE

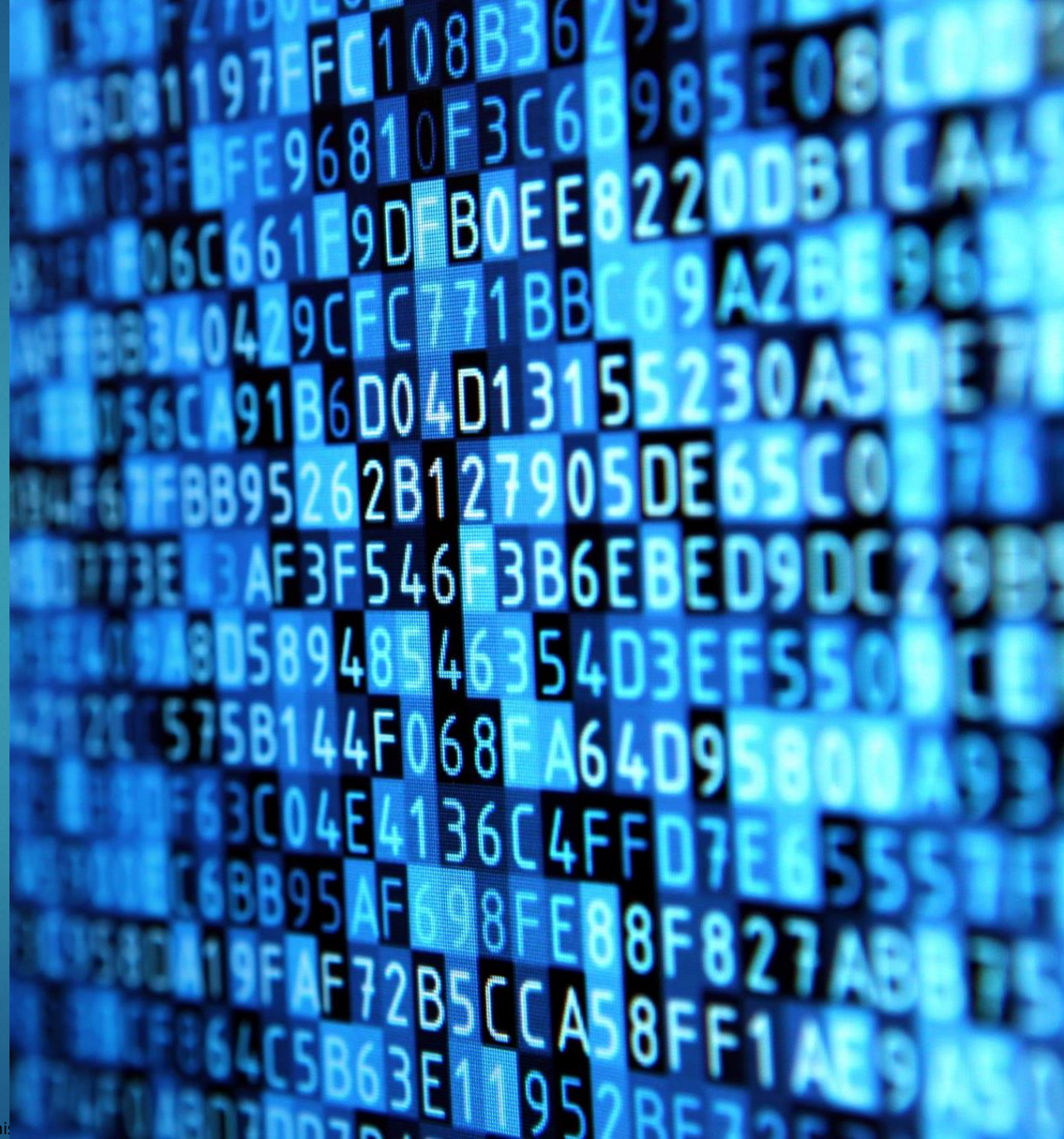
Implications of competition in the e-commerce marketplace

- ▶ Innovate to compete
- ▶ Customer lock-in
- ▶ Control large customer data to improve platform service
- ▶ Control access to technology

Theories of harm related to competition in the digital space

- ▶ Digital monopoly hampering competition and innovation
- ▶ Digital monopolies to lock-in customers
- ▶ Risks to privacy and data

TAXATION OF DIGITAL TRANSACTIONS



E-commerce taxation

- ▶ Value added tax
- ▶ Custom duties
- ▶ Income taxes

The de minimis threshold for customs duties

De Minimis Thresholds—Select Economies in Asia and the Pacific

Economy	April 2016		November 2019	
	Local Currency	in US\$	Local Currency	in US\$
Australia	AU\$1,000	781	<AU\$1,000	750
Brunei Darussalam	BN\$400	301	BN\$400	296
People's Republic of China			CNY 50	8
Japan	¥10,000	93	¥10,000	88
Republic of Korea	KRW 162,420	150	<US\$150 (non-US imports)	150
			<US\$200 (US imports)	200
Malaysia	MYR 500	127	MYR 500	120
Philippines	PHP 10,000	192	PHP 10,000	206
Singapore	S\$400	301	<S\$400	298
Taipei, China	NT\$3,000	103	NT\$2,000	65
Thailand	THB 1,500	48	THB 1,500	47

GST = goods and services tax, VAT = value-added tax.

Notes: "Cross-border e-commerce retail goods" should not be more than CNY 2,000 per person each time and not more than CNY 20,000 per person each year. Foreign exchange rates as of 28 February 2018.

Sources: Global Express Association (2019).

Taxation principles

- ▶ Neutrality
- ▶ Efficiency
- ▶ Certainty and simplicity
- ▶ Effectiveness and fairness
- ▶ Flexibility



Thank You!

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