

## Towards a more sustainable new normal for the transport sector

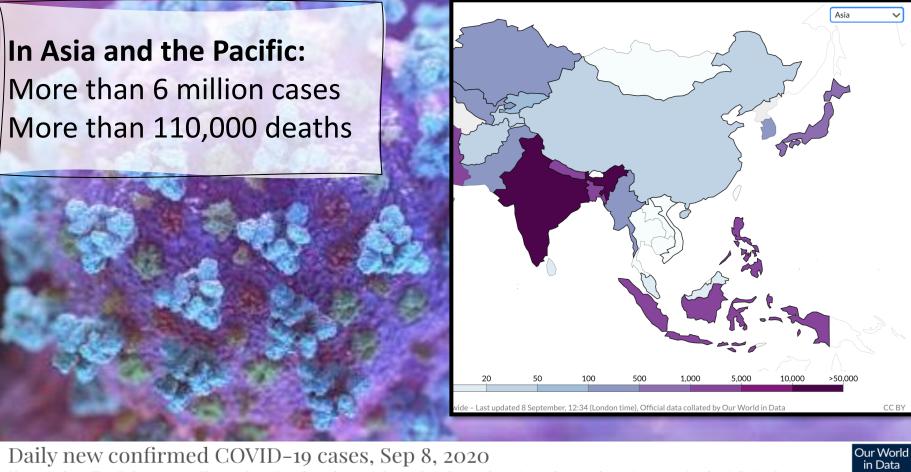
#### **Dr. Bambang Susantono**

Vice-President for Knowledge Management and Sustainable Development Asian Development Bank

18 September 2020



### **COVID-19 in Asia and the Pacific**



#### Daily new confirmed COVID-19 cases, Sep 8, 2020

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.



### **ADB support to COVID-19 response**



## ADB's three pillars of COVID-19 response:

- Finance response actions by member countries
- Convene partners
- Generate and disseminate knowledge



## COVID-19 vaccine "Triple As" approach

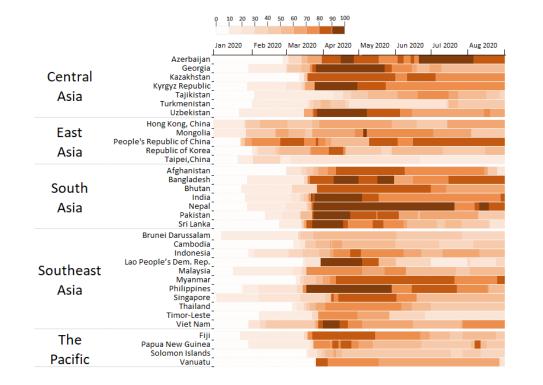
- 1. Availability
- 2. Accessibility
- 3. Affordability



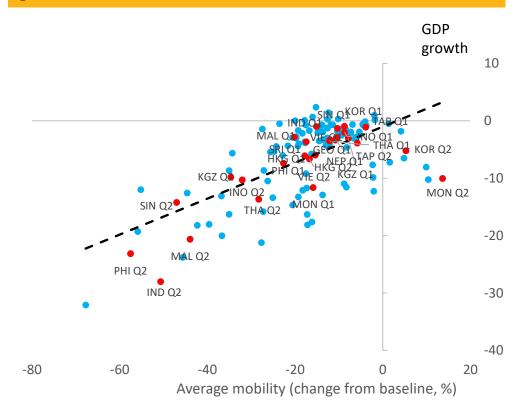
Coronavirus Vaccine

# The outbreak and containment measures restricted mobility and domestic activity...

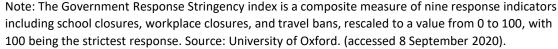
### Stringent containment measures in Asia are now being eased...



## ...but the mobility reductions led to steep GDP growth declines



<sup>75</sup> Notes: Red dots are ADB developing member economies. Year-on-year GDP growth relative to
 GDP growth in Q4 of 2019.
 Sources: CEIC database; Oxford University; and Google.





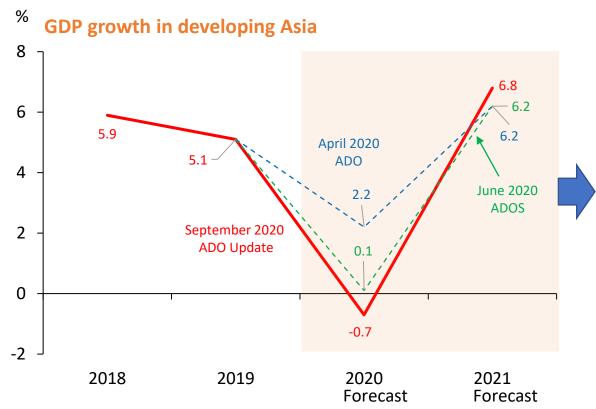
### **Developing Asia will see its lowest growth since 1961, and recovery** of GDP levels in 2021 will not be V-shaped...

While GDP growth rates will recover in 2021, it will not be enough to fully offset the sharp drop in 2020...

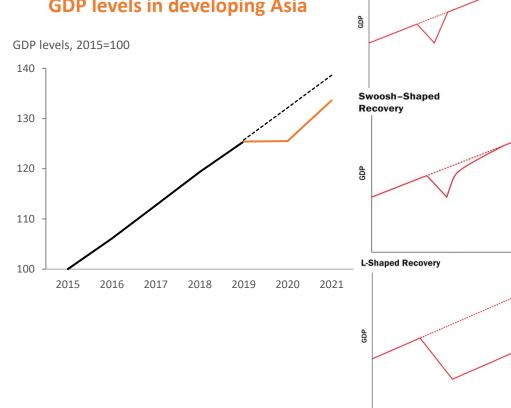
...and GDP levels will be below what they would have been without COVID, in 2021 and possibly beyond.

V-Shaped Recovery

Time



**GDP** levels in developing Asia



Source: Asian Development Outlook Update, September 2020.

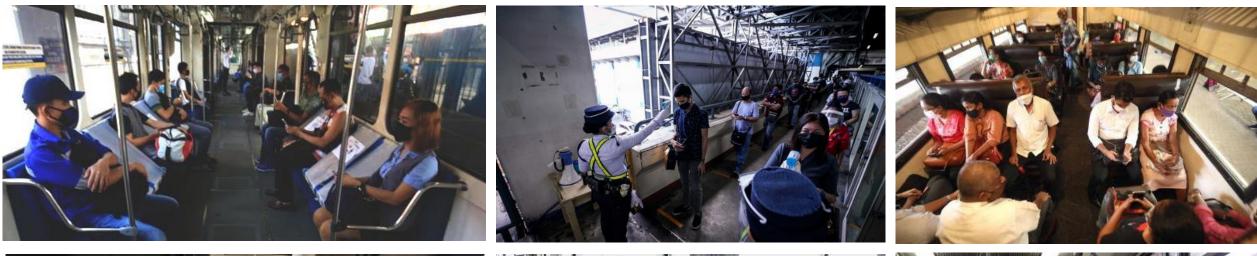
### ...and the decline is broad-based, affecting most economies.

	2020		2021			2020		2021	
	<b>ADO</b>	ADOU	<b>ADO</b>	ADOU		<b>ADO</b>	ADOU	ADO	ADOU
East Asia	2.0	1.3 🔻	6.5	7.0 🔺	South Asia	4.1	-6.8 ▼	6.0	7.1 🔺
Hong Kong, China	-3.3	-6.5 🔻	3.5	5.1 🔺	Bangladesh	7.8	5.2 🔻	8.0	6.8 🔻
PRC	2.3	1.8 🔻	7.3	7.7 🔺	India	4.0	-9.0 🔻	6.2	8.0 🔺
Republic of Korea	1.3	-1.0 🔻	2.3	3.3 🔺	Pakistan	2.6	-0.4 🔻	3.2	2.0 🔻
Taipei,China	1.8	0.8 🔻	2.5	3.5 🔺					
					Central Asia	2.8	-2.1 🔻	4.2	3.9 ▼
Southeast Asia	1.0	-3.8 🔻	4.7	5.5 🔺	Azerbaijan	0.5	-4.3 🔻	1.5	1.2 🔻
Indonesia	2.5	-1.0 🔻	5.0	5.3 🔺	Kazakhstan	1.8	-3.2 🔻	3.6	2.8 🔻
Malaysia	0.5	-5.0 🔻	5.5	6.5 🔺					
Philippines	2.0	-7.3 🔻	6.5	6.5	The Pacific	-0.3	-6.1 🔻	2.7	1.3 🔻
Singapore	0.2	-6.2 🔻	2.0	4.5 🔺	Fiji	-4.9	-19.8 🔻	3.0	1.0 🔻
Thailand	-4.8	-8.0 🔻	2.5	4.5 🔺	Papua New Guinea	0.8	-2.9 🔻	2.8	2.5 🔻
Viet Nam	4.8	1.8 🔻	6.8	6.3 🔻					
<b>Developing Asia</b>	2.2	-0.7 🔻	6.2	6.8 🔺	Excluding NIEs	2.4	-0.5 🔻	6.7	7.2 🔺
	۷.۷	-0.7 🔻	0.2	0.0 🔺		2.4	-0.5	0./	1.2

▲ = upgraded forecast, ▼ = downgraded forecast, no sign = unchanged.

## We are in the new normal

## Yet existing transport challenges remain

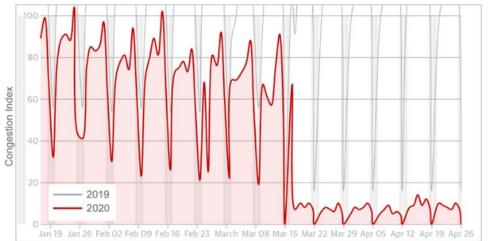






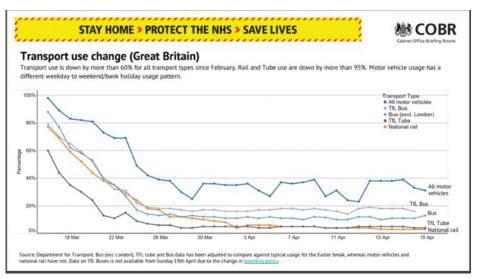
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## **COVID-19 Impacts on Transport**



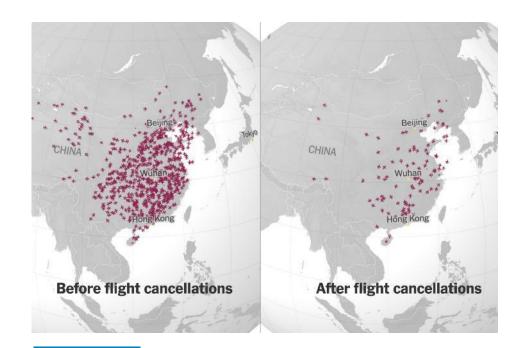
#### Manila

Decrease in traffic prior to lockdown; peak congestion dropped by 90% during lockdown



#### United Kingdom

Transport afell dramatically across all modes

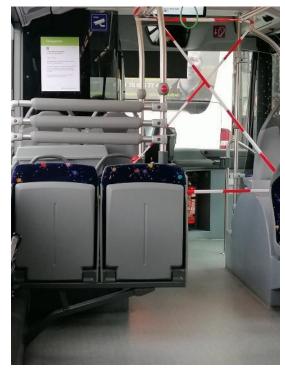


#### Worldwide

Flights have fallen to unprecedented levels



## **Transport System "Reopening"**



Switzerland Plastic separator between bus driver and passengers





#### Korea

(Top) Special taxi drivers in Incheon airport to prevent COVID-19 inflow; (Bottom) Emergency alert text announcing locations visited by confirmed COVID-19 patients

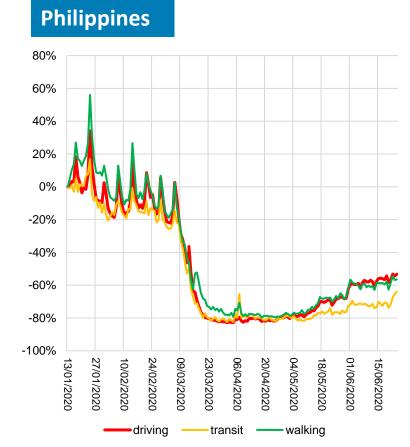


#### Italy Marked seats in the metro



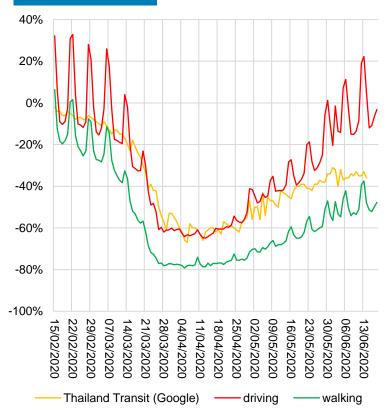


## The collapse (and return) of mobility











## ADB mapped possible future trends

#### **Trend 1: Demand returns on public transport**

Demand on public transport returns to "pre-pandemic" levels.

#### Factors:

- Virus is under control and no reason to avoid public transport OR:
- Staying home is not an option for economic reasons
- High proportion of captive users on public transport
- Lack of viable alternatives

#### Trend 3: Private transport (car, motorcycle) is king

There is unwillingness to return to public transport. Private transport is preferred.

#### Factors:

- Lack of public confidence in public transport (health concerns)
- Users can afford to switch to other modes

**Trend 4: Decreased travel demand** 

• Walking and cycling is not seen as adequate alternatives

#### Trend 2: Shifts to active transport modes (walk, cycle)

Travel mode shifts to walking, cycling, 2-3 wheelers. Less reliance on public transport. Private car mode may hold, or slightly suppressed through road space reallocation.

#### Factors:

- Availability of safe and viable alternatives on alternative NMT modes
- Reallocation of road space to NMT modes

Work from home and e-commerce, and/or economic recession result in an overall lower frequency of travel.

#### Factors:

- Economic downturn reduces demand for passenger and freight transport
- Reasonably high level of digital inclusion and literacy (e.g availability of digital infrastructure and services)
- E-commerce penetration is high
- Type of occupations allow commuters to work remotely.



## **Trend 1:Demand returns on public transport**

#### World

Australia's most populous state doubles public transport capacity as coronavirus curbs ease

Australia (June)

Covid-19: Kiwis' public transport use way above projections, and we're leading the world •

New Zealand (June)

Malaysia (June)

## Public transport to run at full capacity

Editions

XINHUANET

Monday, July 27, 2020

Beijing allows public transport to operate at full capacity

Source: Xinhua | 2020-07-25 20124:23 | Editor: huaxia

PRC (July)

TheJakartaPost

Public transportation returns to normal

Indonesia (June)



We must renew our efforts to ensure that public transport systems are safe, reliable, and resilient to future shocks





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## Trend 2: Shifts to active transport modes (walk and cycle)



## **Trend 3: Private transport** (car and motorcycle) is king

As lockdown ends, Manila's dirty air is back. It doesn't have to stay

by Mavic Conde on 19 June 2020



'Car-led' recovery increasingly apparent, Transport for London chief planner warns

5th June 2020

#### Number of new private cars licensed rises for first time since Covid

Latest CSO figures also show numbers opting for electric or hybrid cars continues to rise

Home > Life > News >> US Vehicle Traffic Has Rebounded To About 90% Of Pre-pandemic Levels As Commuters Steer Clear Of Public Transit, Report Says

US vehicle traffic has rebounded to about 90% of pre-pandemic levels as commuters steer clear of public transit, report says



## Trend 3: Private transport (car and motorcycle) is king

#### HOURLY CONGESTION LEVEL

Last 48 hours Last 7 days

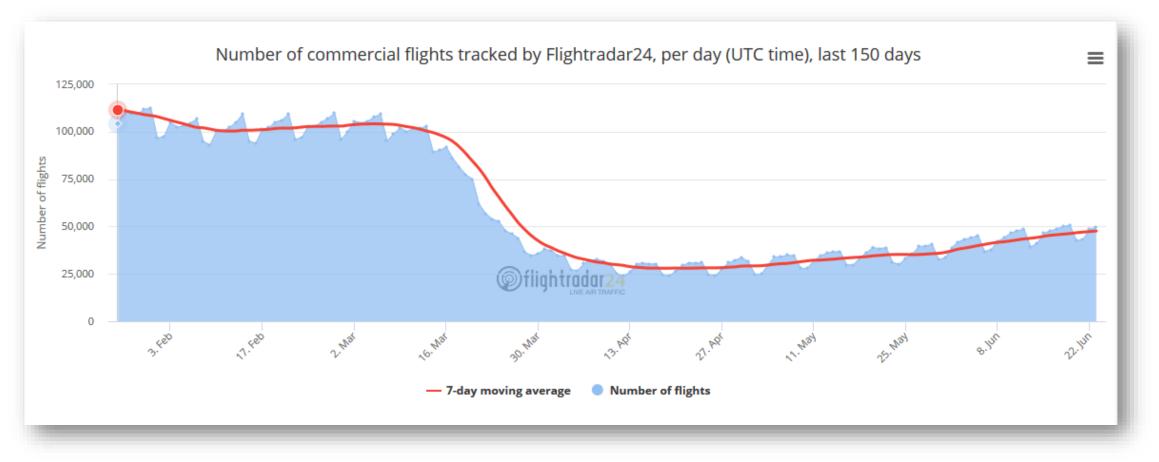
140% Sunday Friday Saturd weanesday Thursday 130% 120% 110% 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 8:00 AM 6:00 PM 8:00 AM 6:00 PM

Beijing traffic congestion, last week of June 2020



## **Trend 3: Decreased travel demand**

- Country borders restrictions have disincentivized international travel
- Rising acceptance of work-from-home serves to replace business travel requirements





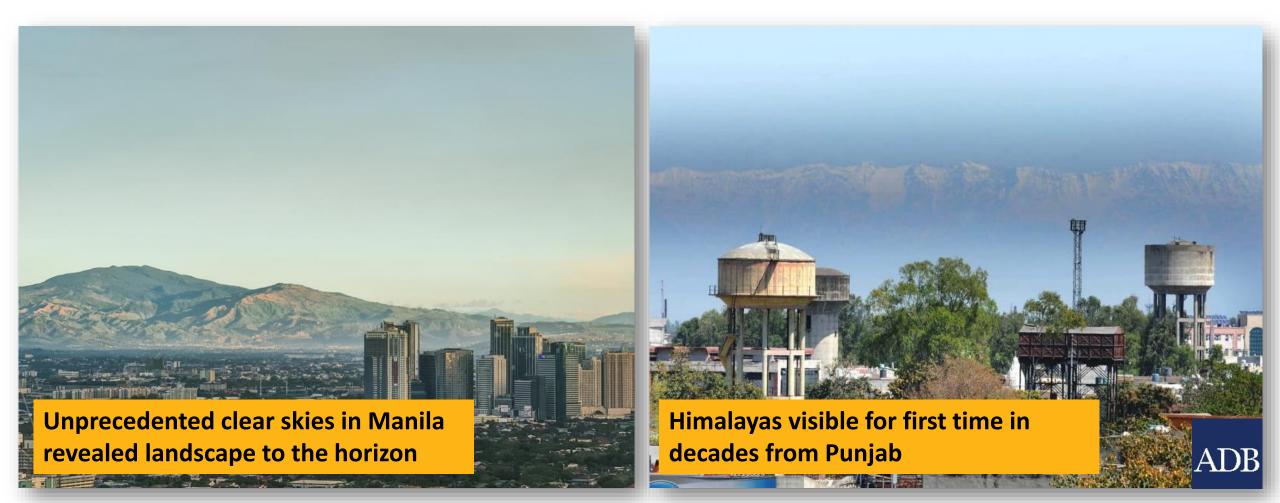
#### **Transport infrastructure and services across Asia still short of meeting demand**

#### **ADB strives to ensure:**

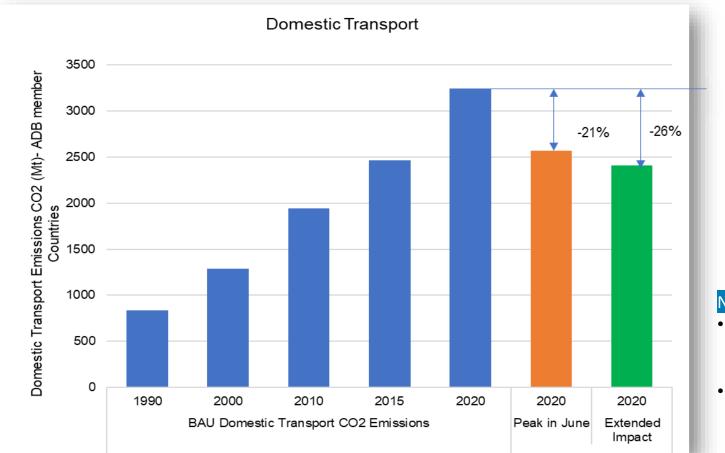
- the poorest in urban areas have affordable transport
- rural communities have reliable access to markets
- isolated island or land-locked countries not disadvantaged by transport costs



## Positive environment impacts brought by COVID-19 in reduced $CO_2$ , $NO_2$ and air pollution



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#### Note

- Peak in June assumes that travel demand reduction peaks in May/June and there is gradual shift to normality
- COVID-19 extended impact scenario assumes peak in May/June but situation does not return to normal till December



## **DIGITAL MOBILITY**

Self-Driving

→ 700 m

0

13:29 48 min 😋 20 km.

35

ollections

0

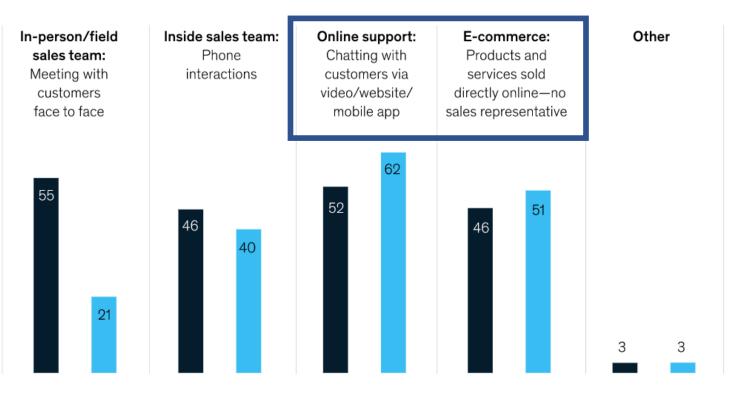
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# B2B companies have shifted their go-to-market models

#### Go-to-market sales model during COVID-19,<sup>1</sup> % of respondents



Before COVID-19

During COVID-19

<sup>1</sup>Question: In what ways was your company's product or service sold before COVID-19? Question: Now today, in what ways is your company's product or service sold during COVID-19?

Source: McKinsey COVID-19 B2B Decision-Maker Pulse #2, 4/20-4/28/2020 (n = 3,755)



# More than 90% transitioned to virtual sales during COVID-19

What has your company done to adjust your sales model for COVID-19? % of respondents



#### **Asia-Pacific**

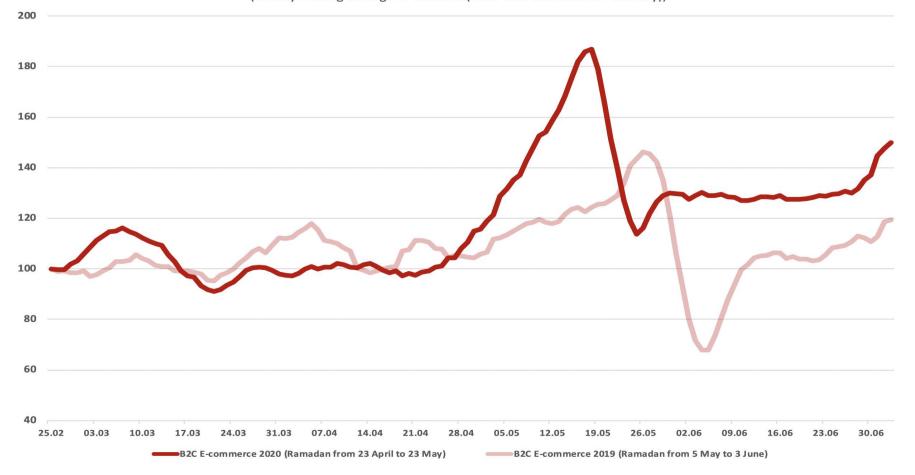




Source: McKinsey (2020)

## **B2C E-commerce in Indonesia:** Shift towards higher new normal

B2C E-commerce in Indonesia during Covid-19 in 2020 and comparison with 2019 (weekly moving average of volumes (base=100 last week in February))





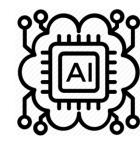
## Urban logistics, supply chain "Digital Apps"



# Facilitating mobility through digital technologies



**Blockchain**: transactions verified and approved by consensus, prevents fraud



Artificial Intelligence: Detects and predicts patterns more accurately; used in customs audits, classification of products



**Biometrics**: verify identities, control access



**Drones**: used by customs for surveillance and monitoring



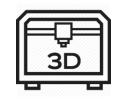
Virtual, augmented, mixed reality: used to project visual assistance in the physical world, e.g. physical inspection, visualize big data



**Digital ID**: provides a low-cost legal identity to any business verifiable globally



Internet-of-Things: Asset tracking in supply chain management, ecommerce



**3D printing**: 3D solid products printed domestically from a digital file





A "bounce-back strategy and framework" has been developed for each transport subsector to assist countries exiting lockdowns and covers three phases:

1- **response** phase in the immediate term (up to 3 months) 2- **recovery** phase in the medium term (up to 1 year), and

3- rejuvenation in the longer term (after 1 year)



## **3Rs of Transportation**

- Rebound
- Redress









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What will the "New Normal" look like?



healthy and inclusive



## THANK YOU

Line III.

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