



“New Normal” in Air Transportation

ERVINA AHYUDANARI

Short Bio:

Organisation:



Edu:
S1



S2



S3



Agenda



Dampak COVID-19 pada industry penerbangan

Persiapan “New Normal”

- New Protocol
- Demand prediction
- Airport Access
- Terminal
- Aircraft Cabin

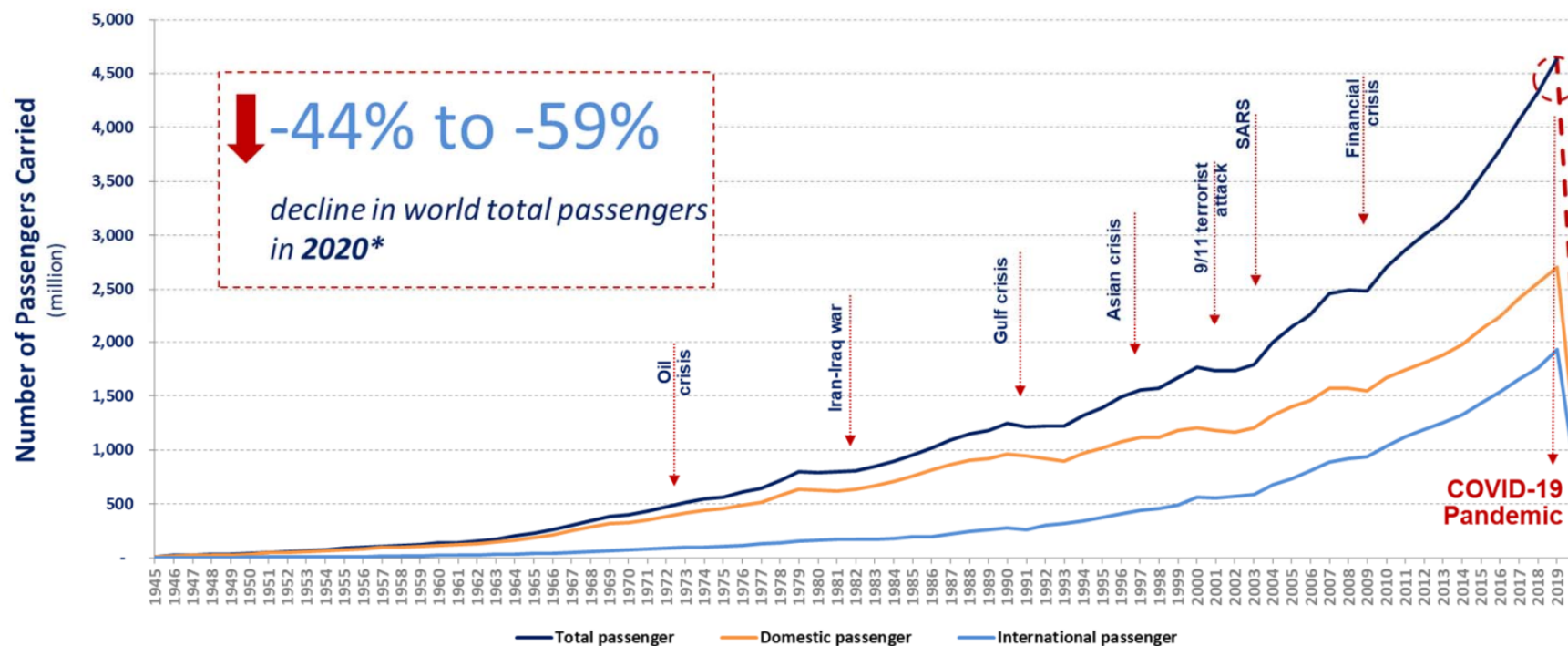


Dampak COVID-19 pada Industri Penerbangan



World passenger traffic collapses with unprecedented decline in history

World passenger traffic evolution 1945 – 2020*

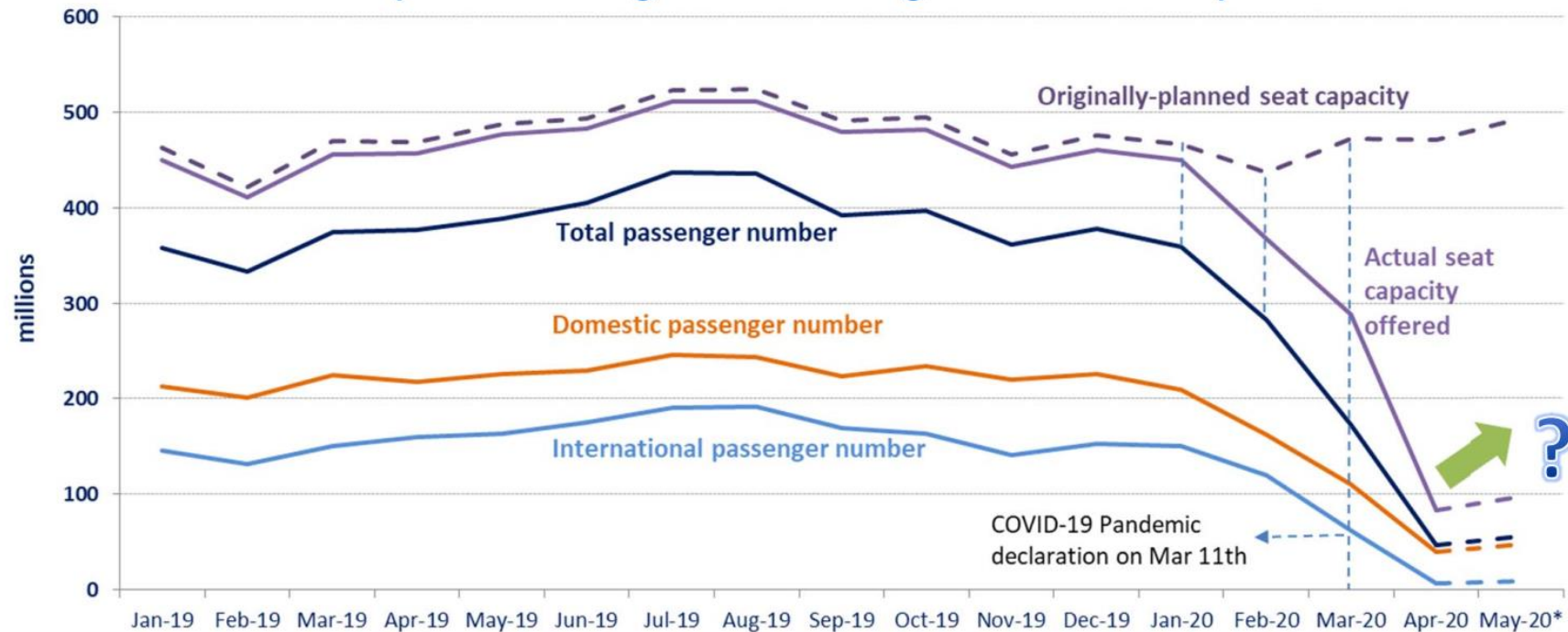


Source: ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.



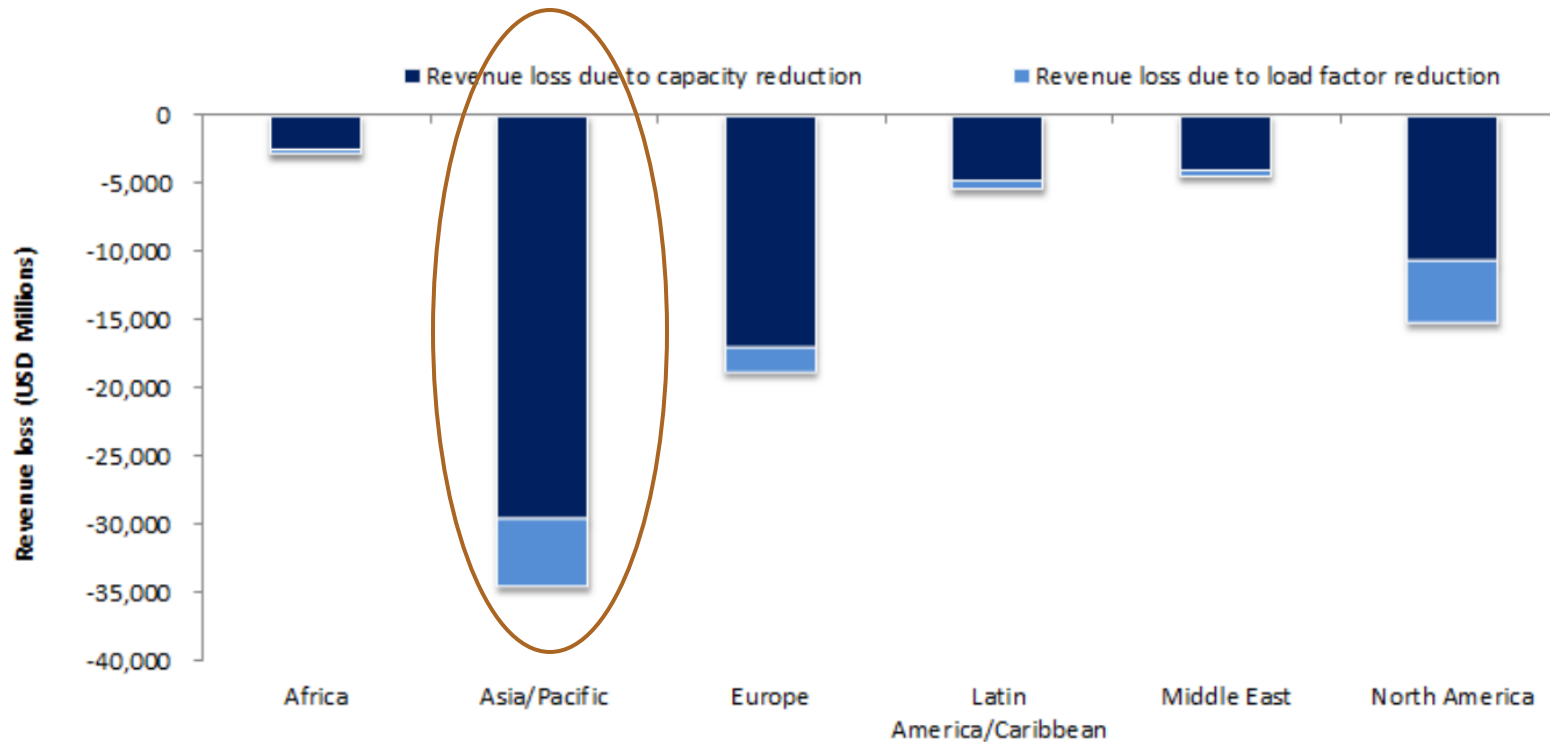
Drastic capacity cut along with dramatic drop in demand

Comparison of passenger numbers and capacity (A silver lining for bottoming out from June?)





Approximately USD 81 billion passenger revenue loss from Jan to Apr 2020



Note: Compared to Baseline (business as usual, originally-planned)

Dampak Covid19 di Dunia Penerbangan



MTI



PUSTRAL
UGM

Penurunan
Penerbangan Global
(ICAO 2020)
-35%

Penurunan
Penerbangan Nasional
(BPS 2020)
-13%

Penurunan
Wisatawan Asing
-31%

1 - 23 April 2020
PM 18/2020

24 April - 6 Mei 2020
PM 25/2020

7-18 Mei 2020
SE Gugus Tugas 4/2020

Penumpang

Penurunan -95.5%

Penurunan -90.5%

Pesawat

Penurunan -83.8%

Penurunan -67.4%

Kargo

Penurunan -56.4%

Penurunan -1.90%

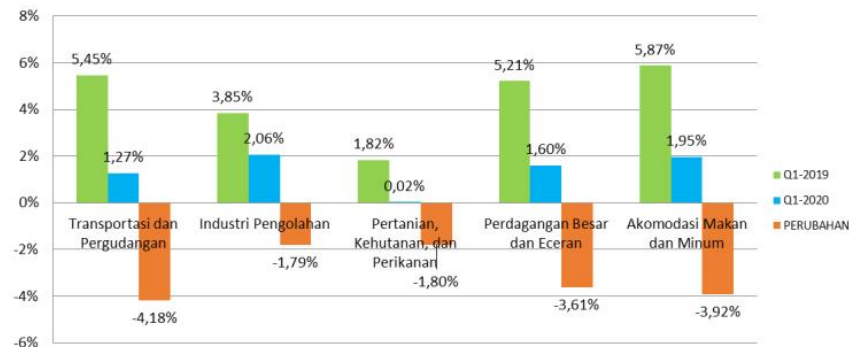
LAJU PERTUMBUHAN EKONOMI SERTA PDB INDUSTRI DAN LOGISTIK TRIWULAN I TAHUN 2019 & 2020

SUPPLYCHAIN
INDONESIA

LAJU PERTUMBUHAN EKONOMI TRIWULANAN (Y-ON-Y)

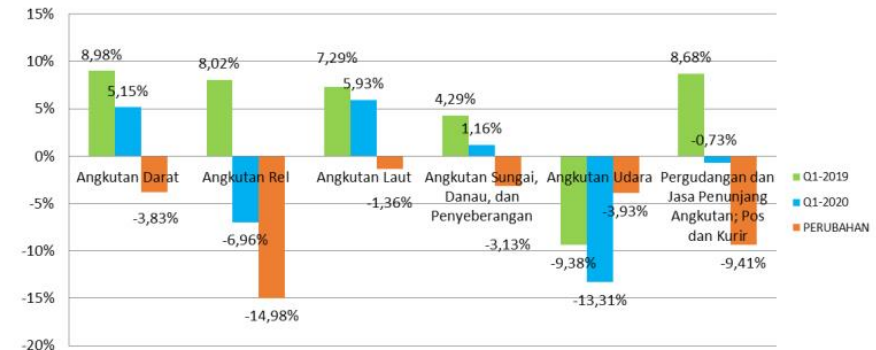


LAJU PERTUMBUHAN INDUSTRI
TRIWULAN I TAHUN 2019 & 2020 (Y-ON-Y)



Sumber: Badan Pusat Statistik (2020)
Diolah Supply Chain Indonesia

LAJU SEKTOR TRANSPORTASI DAN PERGUDANGAN
TRIWULAN I TAHUN 2019 & 2020 (Y-ON-Y)



Sumber: Badan Pusat Statistik (2020)
Diolah Supply Chain Indonesia



SEATS OFFERED (CAPACITY)

▼ - 40%

▼ - 53%



PASSENGERS FLOWN

▼ - 2.291M

▼ - 3.061M



AIRLINE REVENUE LOSS

▼ - USD302bn

▼ - USD400bn

Impact Summary



Persiapan “New Normal”

01

NEW
PROTOCOL

02

DEMAND
PREDICTION

03

AIRPORT
ACCESS

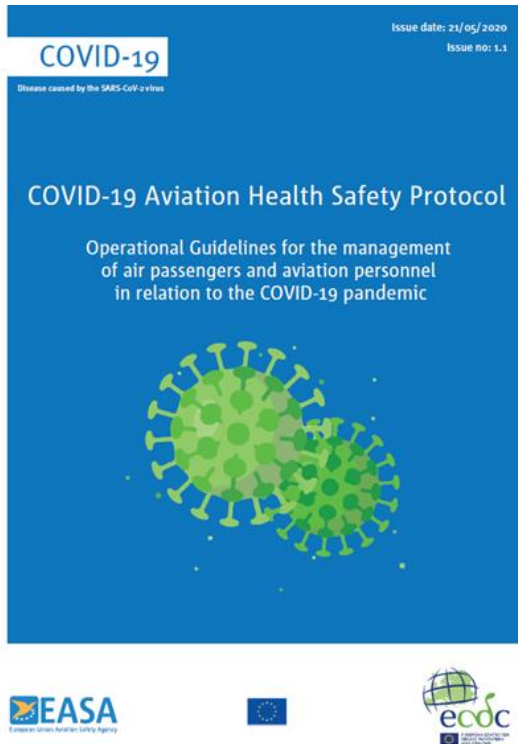
04

TERMINAL

05

AIRCRAFT
CABIN

Persiapan “New Normal”



International Civil Aviation Organization

Council Aviation Recovery Task Force (CART)

Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis

Montréal, Canada, 27 May 2020

ATTACHMENT



Restarting aviation following COVID-19



Medical evidence for various strategies being discussed as at 8 May 2020 IATA Medical Advisory Group

Introduction

Many international groups are exploring possible pathways to facilitate a "restart" of international airline aviation. The resumption of international flights will require a number of hurdles to be crossed in order for Governments to allow travel, and further hurdles in terms of the passenger journey, which includes the airports of departure and arrival, the flights themselves, and other elements. Discussion by all of the groups involved includes a number of key elements which depend on sound medical evidence. The aim of this note is to review the current state of medical evidence regarding those elements.

The state of knowledge is changing rapidly; hundreds of research articles have been published since the start of the outbreak, and an enormous amount of work is in progress with both researchers and industry. Therefore, this document must be read with the latest review date in mind.

There are many logistical, financial, and political aspects to the restart plans well beyond the scope of this discussion, which will be confined to the medical aspects. There are also reports specific to airports and immigration processes which are also out of scope here. The report has been prepared by IATA's Medical Advisor along with the Medical Advisory Group of 10 airline medical directors, on the basis of extensive review of available literature, advice and expertise during the pandemic thus far.

Little is available in the way of published research on in-flight transmission of COVID-19. One paper from Canada reports careful follow up of a long-haul flight on which someone later confirmed to have been unwell at the time, but no secondary cases resulted. A recent public report shows that a flight on 31 March from USA to China Taipei with 12 people subsequently confirmed to be symptomatic at the time of flight, generated no secondary confirmed cases from the 328 other passengers and crew members, who all tested negative.

An informal survey of 18 major airlines in correspondence with IATA has identified, during Jan-Mar 2020, just three episodes of suspected in-flight transmission, all from passenger to crew, and a further four episodes of apparent transmission from pilot to pilot, which could have been in-flight or before/after (including layover); there were 22 instances of suspected passenger-to-passenger transmission reported by the group of airlines. The group of airlines represents 14% of global traffic for that period. A request to a much larger group of 70

01 New Protocol

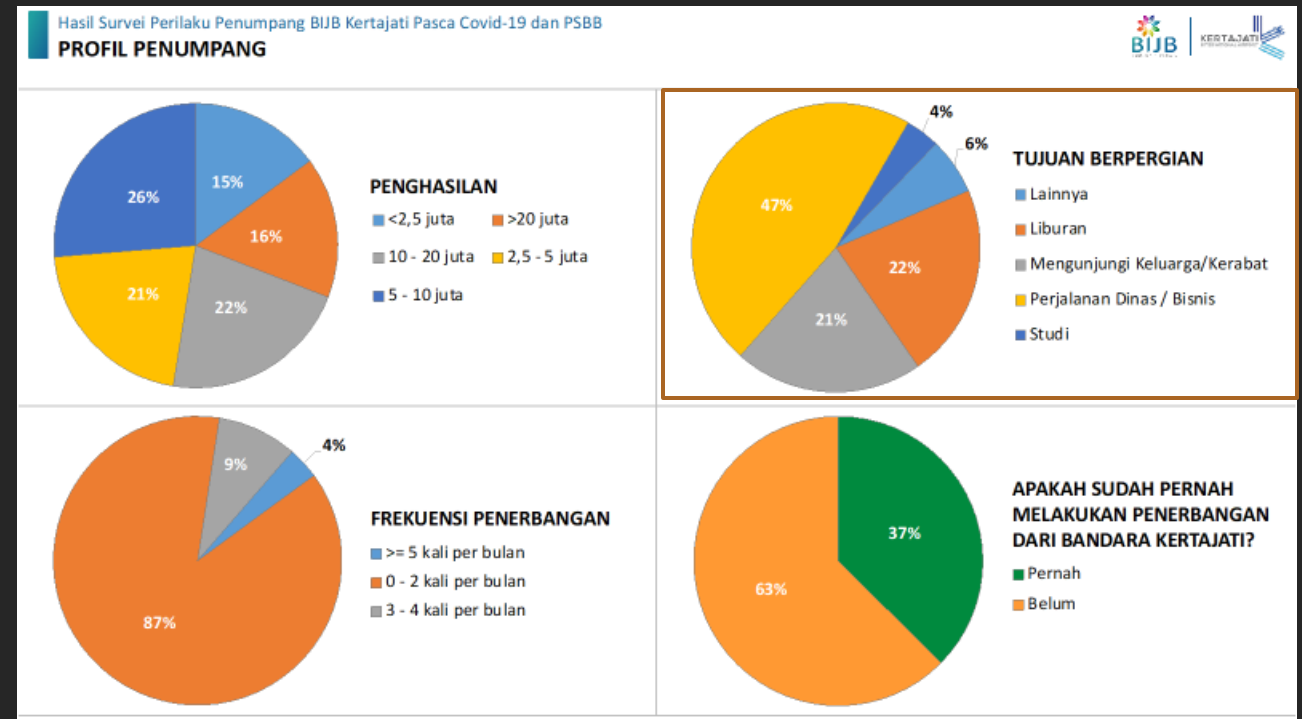
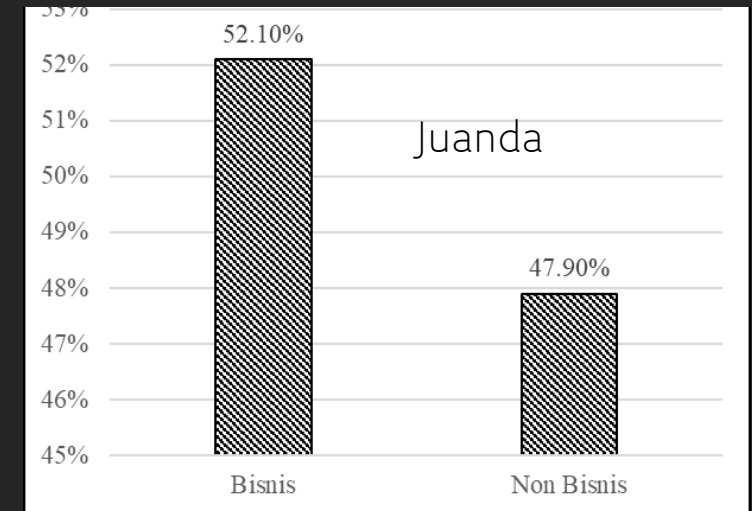
02 Demand Prediction

Demand di dua bandara yang disurvei cenderung menunjukkan bahwa penumpang bisnis mendominasi pergerakan penumpang

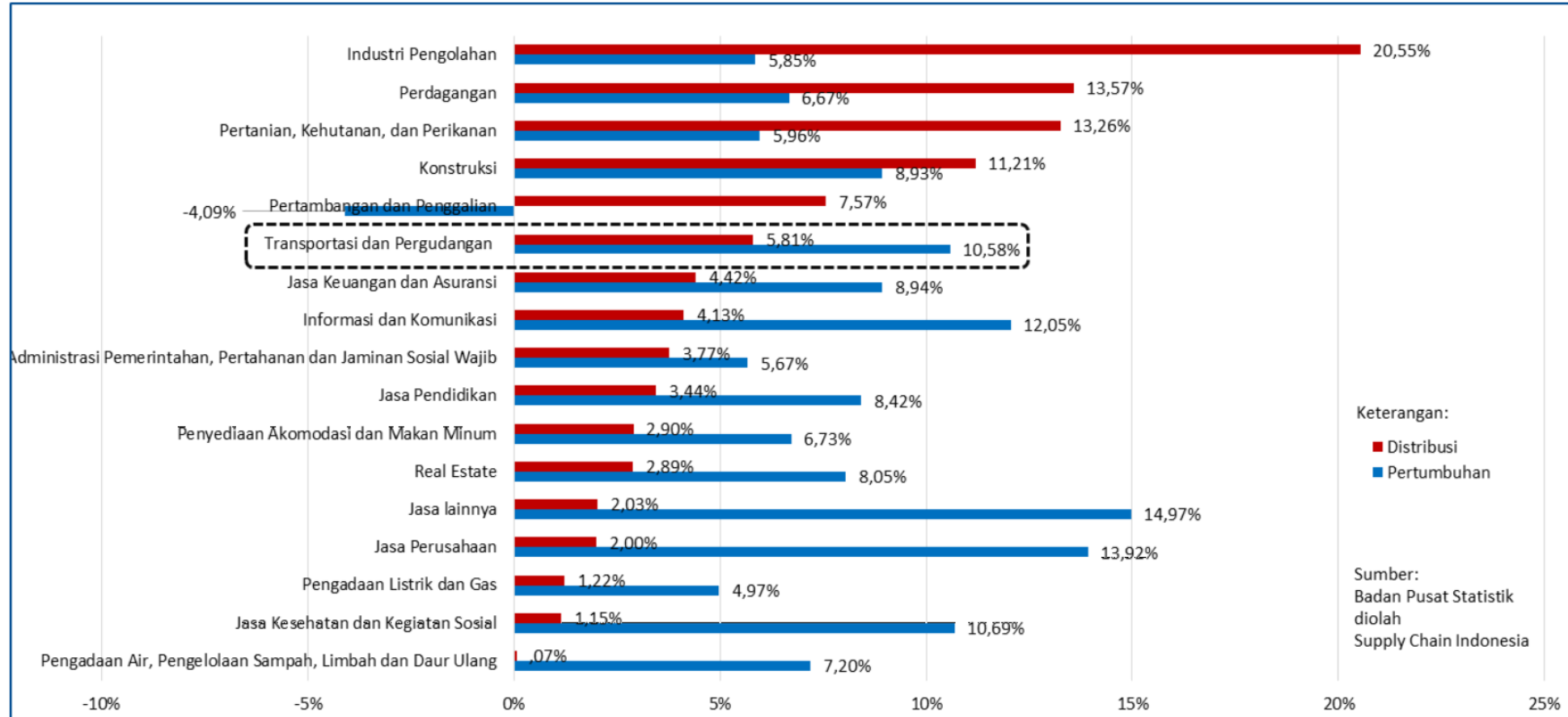
Jumlah responden di Juanda 900, di Kertajati 600

Penumpang bisnis cenderung akan segera melakukan perjalanan apabila fasilitas penerbangan dibuka

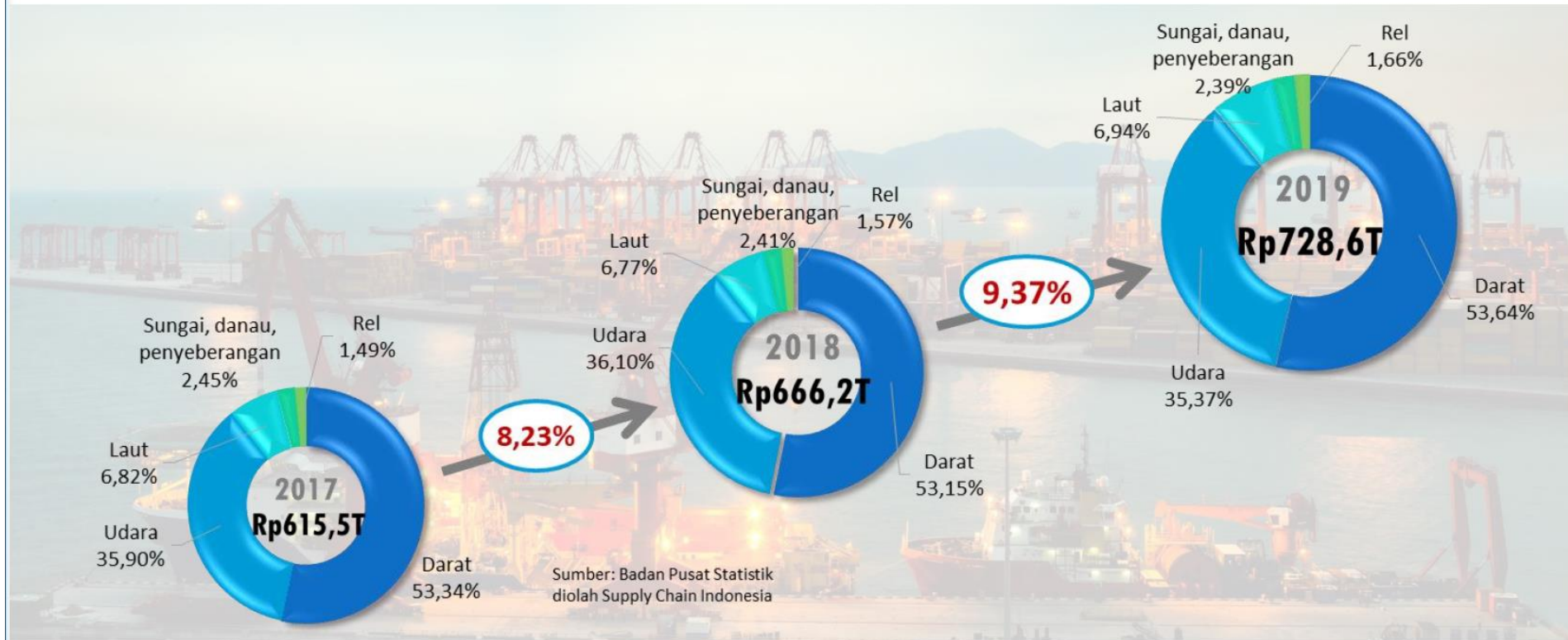
Prediksi hanya 50% penumpang di bandara



DISTRIBUSI & PERTUMBUHAN PRODUK DOMESTIK BRUTO 2019



PERTUMBUHAN PDB PER MODA TRANSPORTASI 2017-2019



Peluang Logistik E-commerce

PELUANG LOGISTIK E-COMMERCE

SUPPLY CHAIN
INDONESIA

Home / Ekonomi / Bisnis

Berkat E-commerce, Bisnis Logistik Diprediksi Tumbuh Pesat

Kompas.com - 12/09/2018, 16:34 WIB

BAGIKAN: [f](#) [t](#)



Sumber: kompas.com

Ribuan Pengusaha Logistik Berebut Pasar Konsumen E-commerce

Reporter: Andi Ibnu
Editor: Ali Akhmad Noor Hidayat

Kamis, 7 November 2019 07:00 WIB

0 KOMENTAR [f](#) [t](#) [g](#) [v](#)



Sumber: bisnis.tempo.co

Berkat E-Commerce, Bisnis Ekspedisi Tetap Moncer di 2019

Septian Denny
11 Okt 2019, 09:30 WIB

Sumber: liputan6.com

Home / News / Regional

PT Pos Siap Rambah Bisnis Kurir E-Commerce

Kompas.com - 04/03/2019, 10:54 WIB

Sumber: regional.kompas.com

Home / Ekonomi & bisnis / Translog

Serius Garap E-Commerce, Garuda Luncurkan Aplikasi Tauberes

Direktur Kargo dan Pengembangan Usaha PT Garuda Indonesia Tbk, Mohammad Iqbal menjelaskan Tauberes merupakan platform e-commerce yang menyediakan jasa pemesanan logistik, baik untuk kurir, air cargo gateway, dan sistem pembayaran.

Rio Gandy Pradana • Bisnis.com
11 September 2019 / 19:50 WIB

Sumber: bisnis.com

Sarin, 18 Mei 2020

TEMPO.CO

HOME / BISNIS

Belanja Online Marak, Angkutan Kereta Logistik Naik 16 Persen

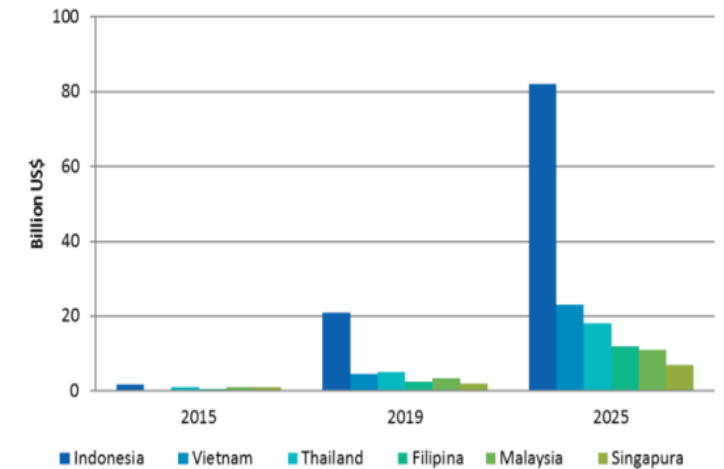
Reporter: Francisca Christy Rosana
Editor: Dewi Risa Cahyani

Korea, 14 Mei 2020 09:34 WIB

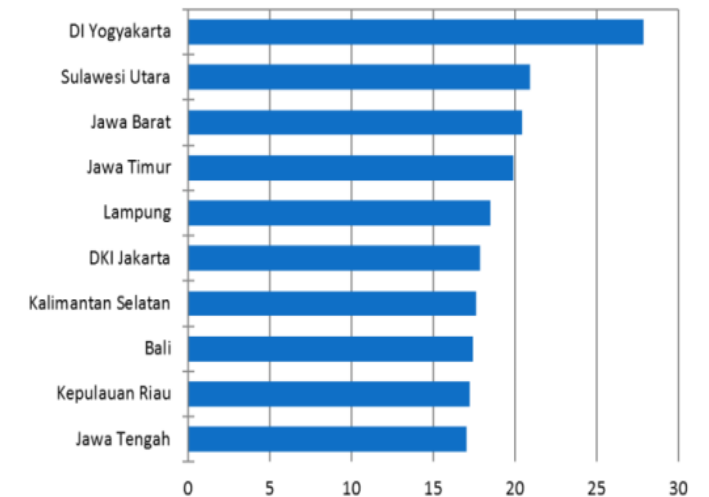
Sumber: bisnis.tempo.co

Sumber: google, Temasek, Baim, & Company (Oktober 2019)
dalam databoks.katadata.co.id

PANGSA PASAR E-COMMERCE ASEAN TAHUN 2015-2025



10 DAERAH DENGAN JUMLAH USAHA E-COMMERCE TERBANYAK TAHUN 2019 (%)



Sumber: Badan Pusat Statistik (Februari 2019)
dalam databoks.katadata.co.id



Summary

Efisiensi di bidang logistic akan membantu menutup penurunan revenue bandara dari sektor penumpang

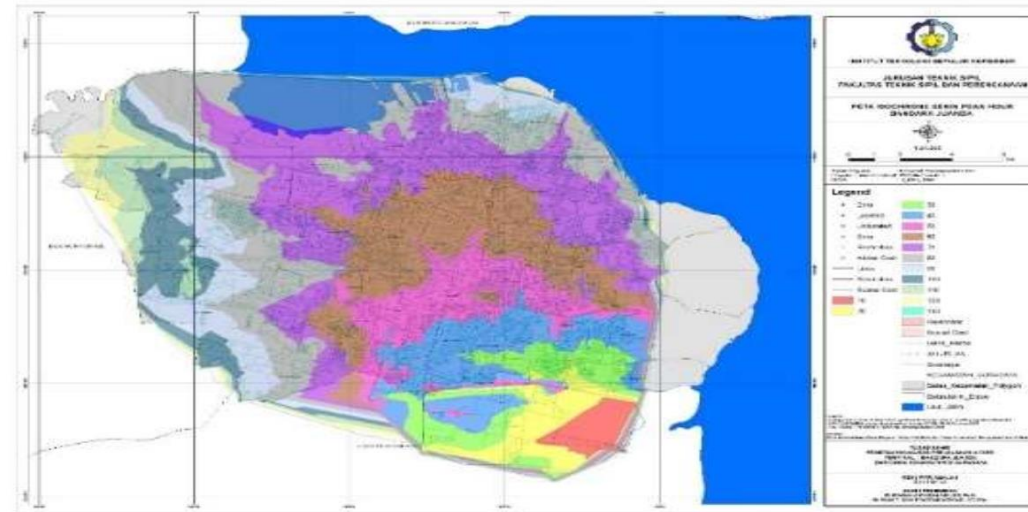


03 Airport Access

Travel time

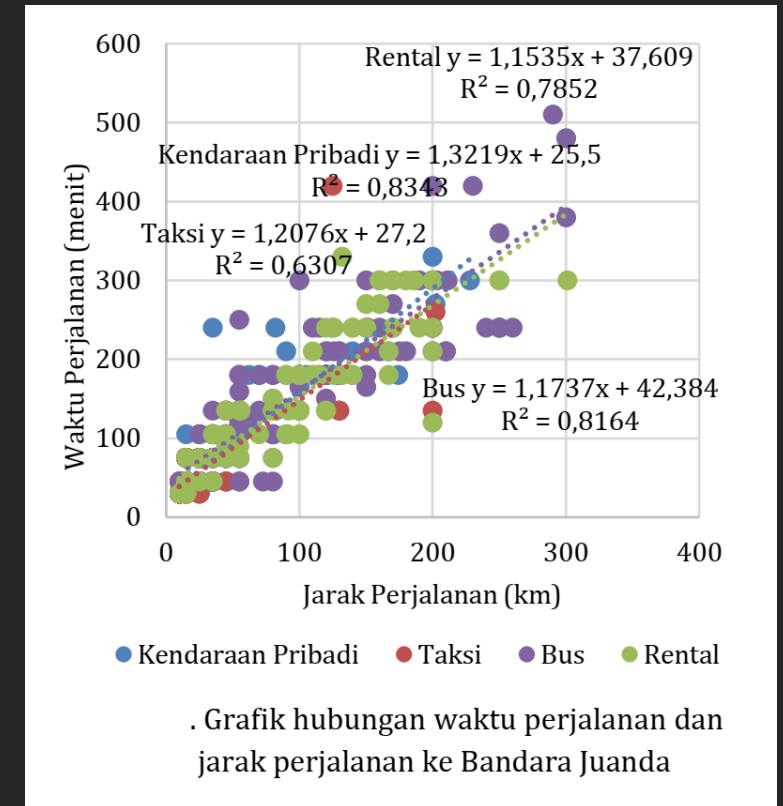
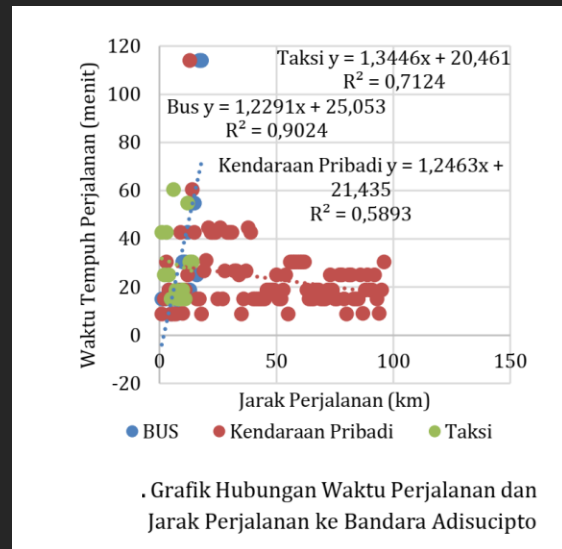
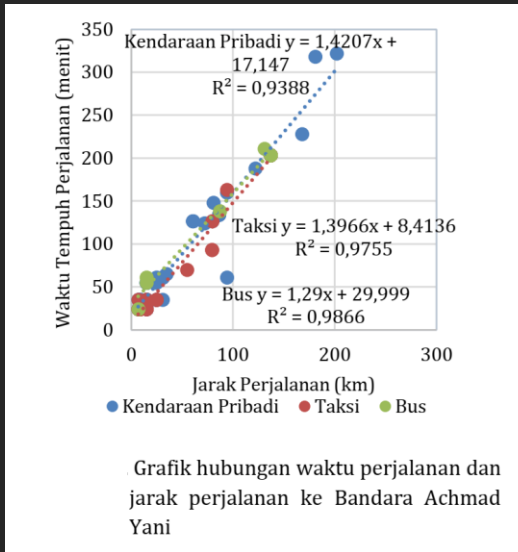
Gambar di samping menunjukkan perubahan waktu perjalanan pagi dan sore pada hari Senin menuju Juanda

Perubahan protocol transportasi untuk kendaraan penumpang pasti akan berpengaruh pada waktu perjalanan



Moda Akses

Penggunaan kendaraan pribadi akan menggantikan semua kendaraan pilihan lain dikarenakan adanya kekuatan “jejak COVID” pada kendaraan umum



Summary

Perubahan waktu perjalanan dan moda transportasi akses bandara perlu ada simulasi kemungkinan penumpukan kendaraan pada suatu waktu.





04 Terminal



PRE FLIGHT



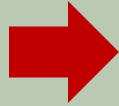
Indonesia National Air Carriers Association

Pre Clearance Document

Notice of Airport Capacity NAC



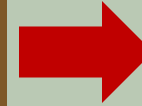
- BUAU wajib untuk mensosialisasikan persyaratan kesehatan penumpang



- Online ticket Reservation



- Pemeriksaan kesehatan dan HAC

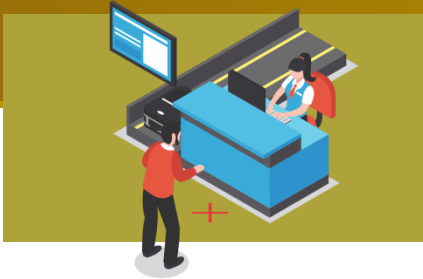


- Boarding (Social Distancing)



- Kordinasi terhadap penanganan penumpang dengan gejala COVID-19
- REPATRIASI





POST FLIGHT



Indonesia National Air Carriers Association

- Pelaksanaan social/physical distancing



- Penumpang yang transit atau transfer wajib turun dari pesawat



- Pemeriksaan suhu tubuh, saturasi oksigen dan wawancara serta pemeriksaan dokumen perjalanan

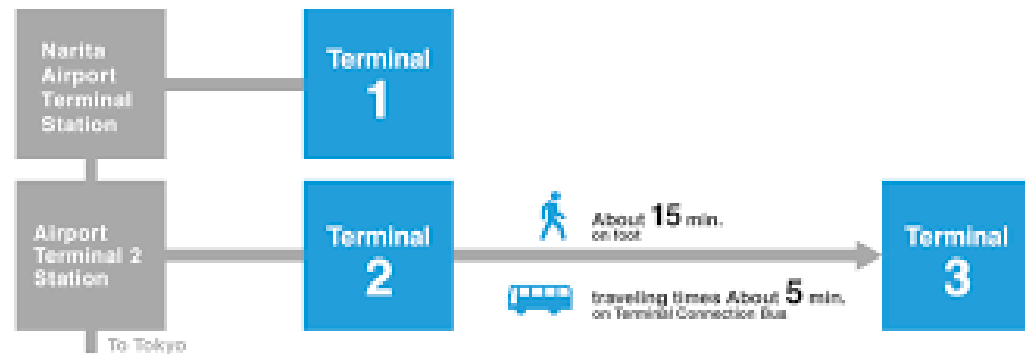


- Pengambilan bagasi CEPAT dan SEGERA (physical distancing)

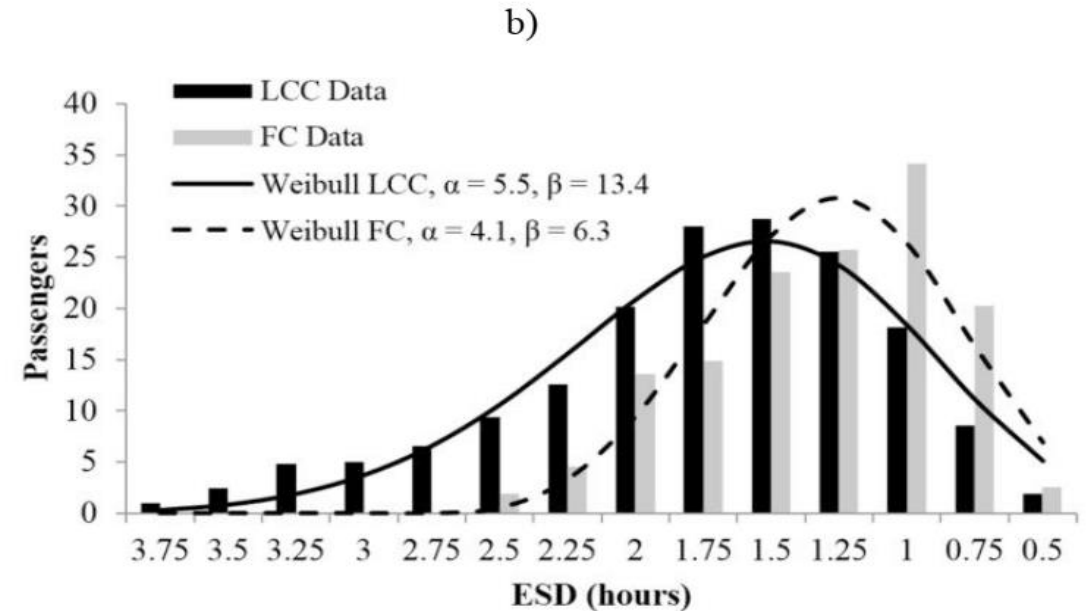
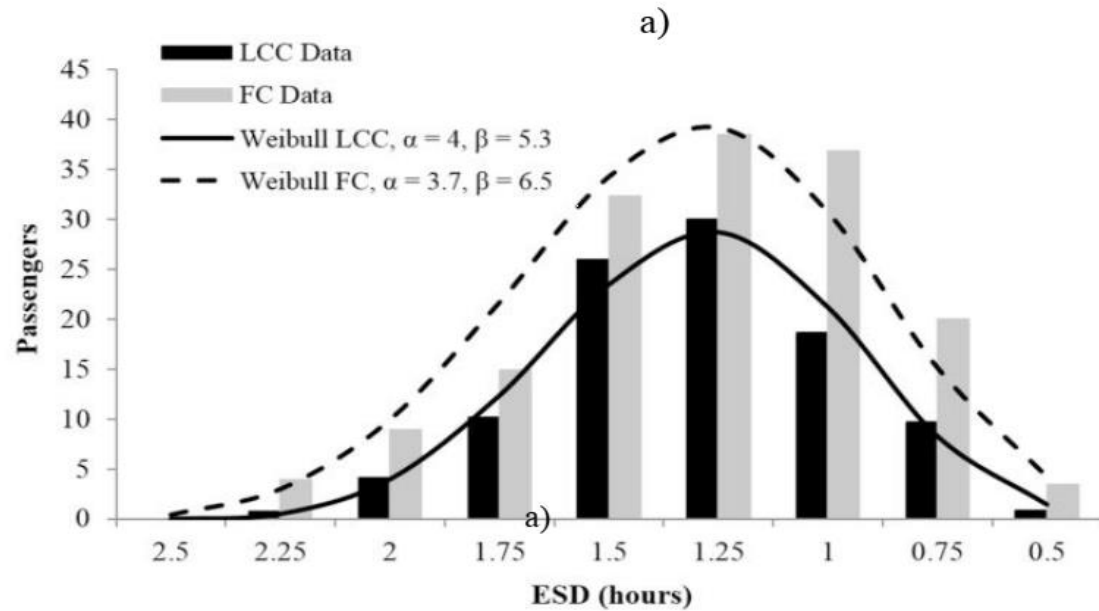


- Penanganan penumpang dengan gejala COVID-19 di kordinasikan dengan petugas





Pengenalan aliran penumpang untuk mengurangi titik konflik



LCC and FC passenger arrival function, early morning (a) and late afternoon (b)

Sumber: Postorino, et al, 2019



Distribusi kedatangan penumpang di terminal

PERLU DILAKUKAN
SIMULASI KEDATANGAN
PENUMPANG MENINGAT
ADA TAMBAHAN
PEMERIKSAAN KESEHATAN

Perbaikan design terminal



Penyesuaian
luasan

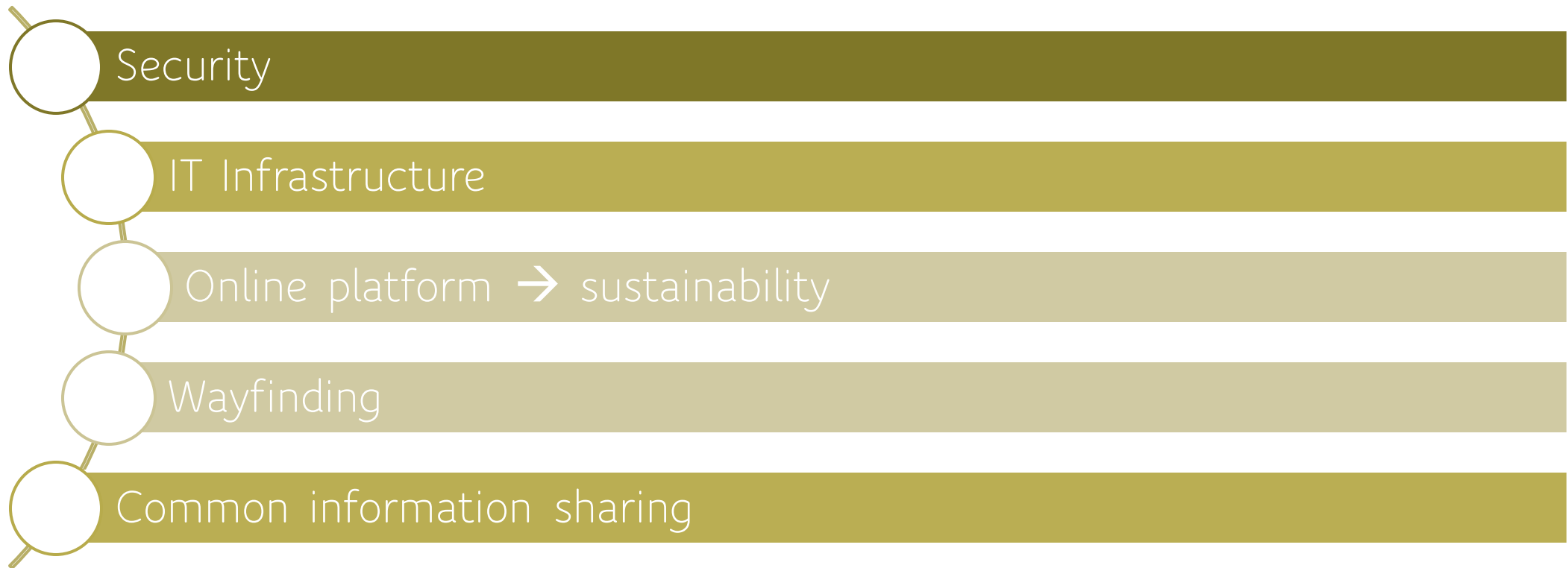


Pengaturan
antrian



Tinjauan
fungsi
ruangan

Perbaikan sistem



A photograph of an Airbus Airspace aircraft cabin interior. The image shows a window on the left with a view of a bright sky and clouds. The window frame has 'AIRSPACE' written on it. To the right of the window is a white leather headrest with 'AIRSPACE' written on it. The cabin floor is covered in a grey carpet. A semi-transparent dark blue box is overlaid on the right side of the image, containing the title and subtitle text.

Clean air on board

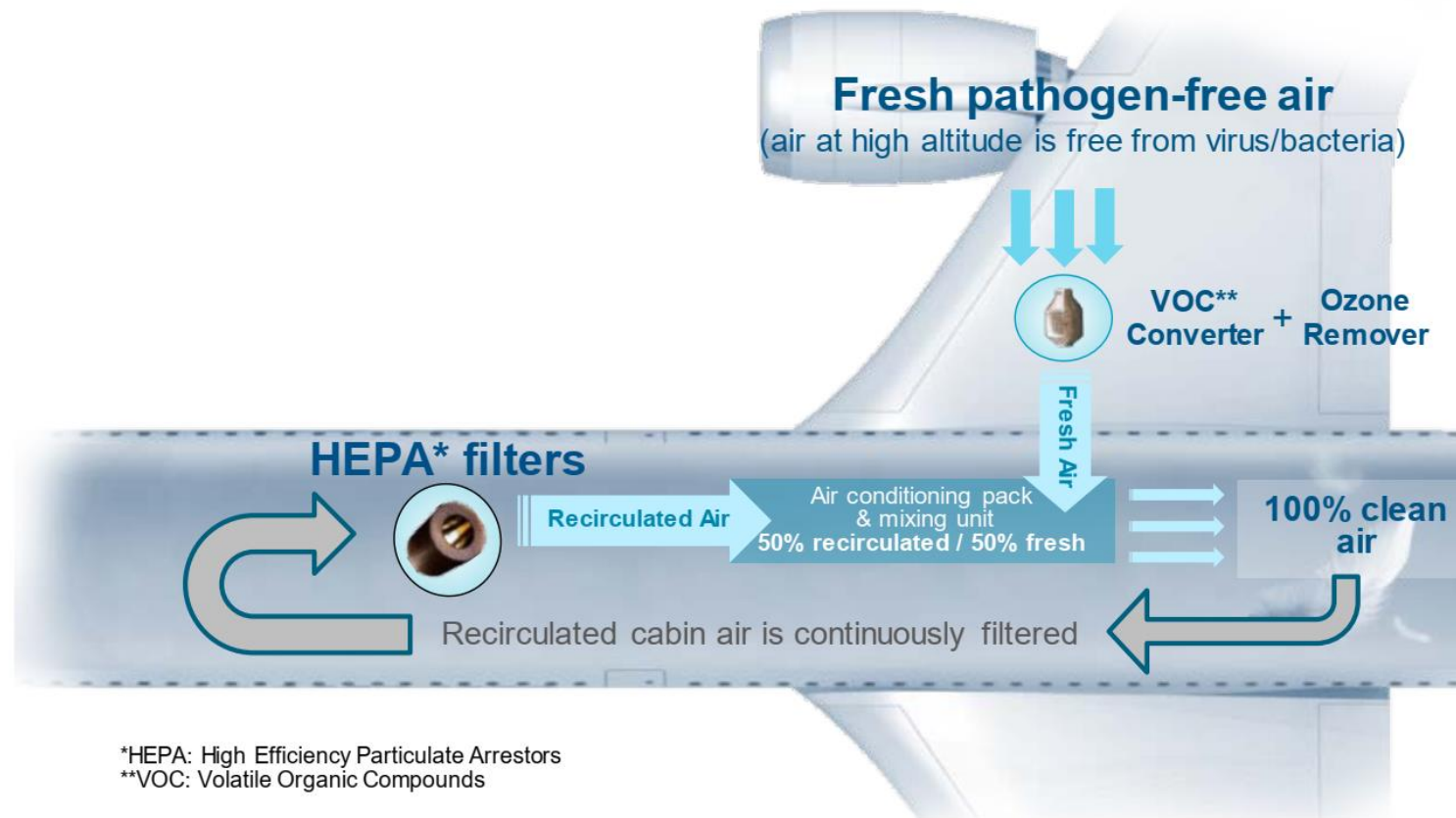
How Airbus keeps cabin air free from virus and bacteria

May 2020

AIRBUS

05 Aircraft Cabin

Conditioned, filtered, fresh air for a safe and healthy flight



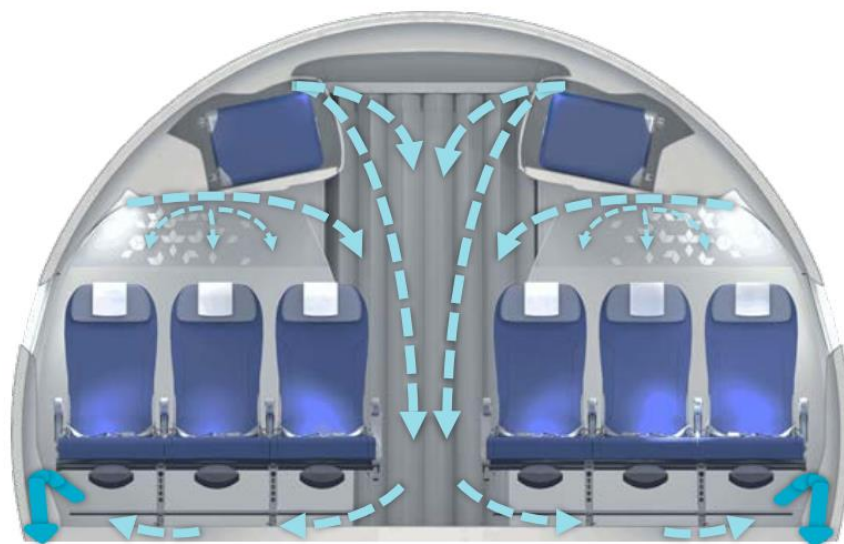
Advanced filtration

The air is fully renewed every 2-3 min

HEPA filters remove more than 99.9% of particles, virus and bacteria

Hospital-grade air filtration

AIRBUS



Optimised **top-to-bottom** airflow patterns
Avoiding spread of virus/bacteria



Cabin air
continuously renewed
every 2-3 minutes

(hospitals≈10min, offices≈20min)



Well-positioned air inlets &
outlets: **efficient** cabin **air**
distribution



**Fresh &
clean air by
design**

The **air** is fully
renewed every
2-3 min

Flow patterns limit
air mixing along the
cabin

Lavatory and galley
air is directly
exhausted outside

AIRBUS



Transportasi Udara Masa Depan



**I followed
my heart
and it led
me to the
airport.**

All human life
can be found in
an airport

David Williams



Terima Kasih

ervina@ce.its.ac.id