

The 72nd Transport Policy Seminar

Digital Health Certificates and Integral Solutions for the Airline Industry

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- 1. Impact of new coronavirus infections on the airline industry**
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1. Impact of new coronavirus infections on the airline industry

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Event	Maximum impact (Period)	Impact period
2001 September 11th attacks	▲ 20% (2 months later)	1 year and 4 months
2003 SARS epidemic	▲ 15% (3 months later)	6 months
2009 economic downturn precipitated by the Lehman Brothers bankruptcy in 2008	▲ 5% (10 months later)	1 year and 6 months
2020 new coronavirus infections	▲ 95% (3 months later)	Four or five years?

Source: IATA (Prepared by the author from materials released on June 16, • 2020 and March 17, 2021)

1. Impact of new coronavirus infections on the airline industry

Estimate announced by IATA May 26, 2021

Time passengers are held at departure and arrival airports

(Check-in, security check, immigration check, customs check, baggage claim, etc.)

Before Corona

Average about 1.5 hours

**After Corona
(Paper-based)**

Assuming that paper documents are used for screening as in the past, it would take an enormous amount of time at check-in and immigration.

Average about 8 hours

※If demand recovers to 2019 levels

Digitalization of health certificates is urgently needed.

2. Digital health certificates and platforms

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Examples of digital health certificates (wallets) from countries and regions around the world

Country / Region	Name	Certification details
China	International travel health certificate	Proof of vaccination and negative test results
Israel	Green pass	Proof of vaccination, proof of negativity, and proof of recovery
New York, USA	Excelsior Pass	Proof of vaccination and negative test results
EU	EU Digital COVID Certificate	Proof of vaccination, proof of negativity, and proof of recovery
Africa	Trusted travel pass	Proof of vaccination and negative test results
Denmark	Corona pass	Proof of vaccination, proof of negativity, and proof of recovery

Mainly used for intra-regional travel, eating and drinking, concerts and events, gyms, etc.

2. Digital health certificates and platforms

A digital health platform to enable international human traffic

Determine whether or not to travel by comparing proof of vaccination and negative test results with the entry requirements of the destination country.

Name	Manager	Features
CommonPass	Commons project (In cooperation with the World Economic Forum)	Intended for use beyond international travel
IATA Travel Pass	IATA	Future plans include integration with biometric authentication (One ID)
VeriFLY	American Airlines, Daon (ID authentication management company)	Focusing on oneworld member airlines?
ICC AOK Pass	International Chamber of Commerce (ICC) International SOS (Emergency Medical Service Company)	Air France/KLM begins demonstration experiment

An urgent task for global airlines to achieve full-scale resumption of international aviation

3. IATA Travel Pass Example

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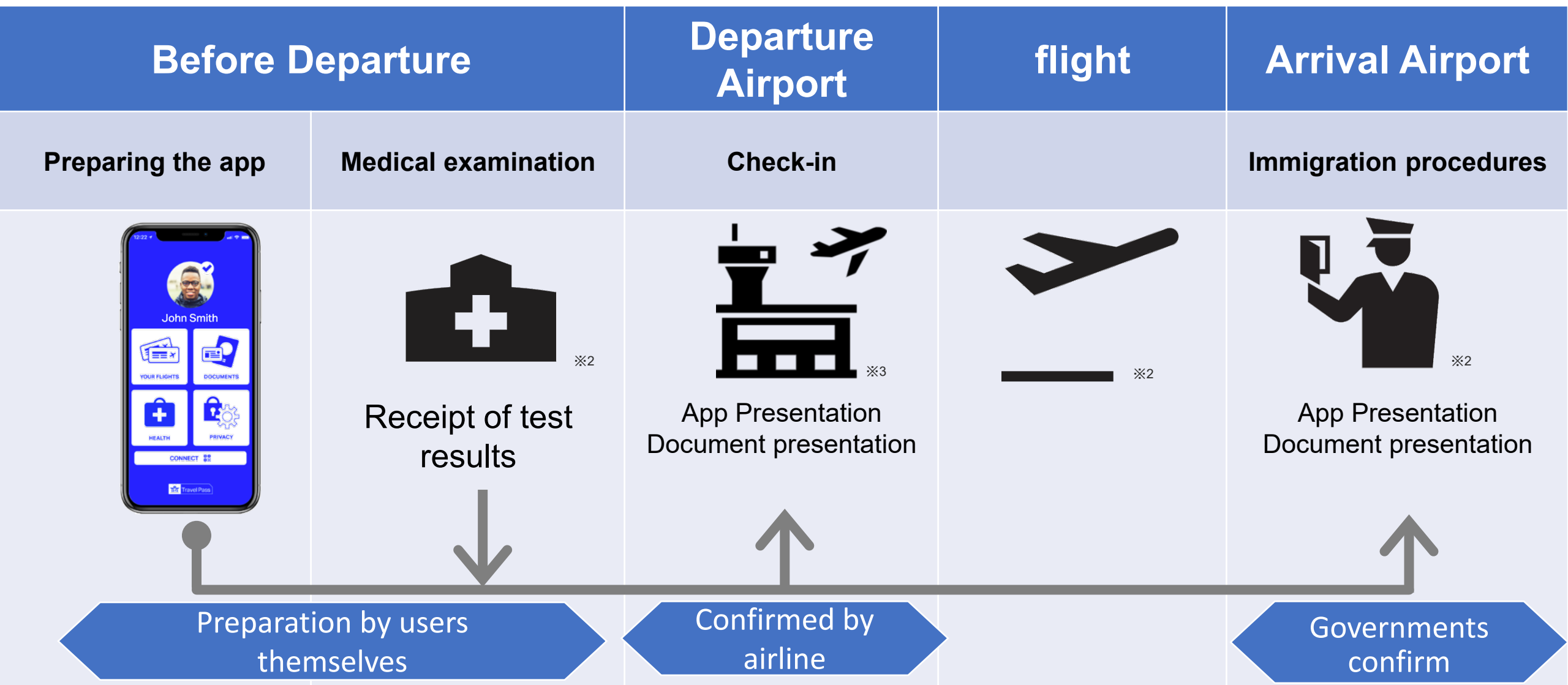
Introduction Video



「IATA TravelPass - Japanese subtitles」 URL: <https://youtu.be/iTeAMXfyEX4>

3. IATA Travel Pass Example



How to use the IATA Travel Pass



Note: Application image pictograms are created by the following entities. ※1: IATA ※2: Foundation for Promoting Personal Mobility and Ecological Transportation ※3: icon-rainbow.com



3. IATA Travel Pass Example

How to use the IATA Travel Pass

Before Departure	<div>Preparing the app</div> <div></div>	<ul style="list-style-type: none">• Download the app• Take a photo and video, read passport information, and create a digital ID (stored in DOCUMENTS)• Enter your flight information (stored in YOUR FLIGHTS) and check the new coronavirus testing requirements for your destination.
	<div>Medical examination</div> <div></div>	<ul style="list-style-type: none">• Receive a new coronavirus test and vaccination that meets the testing requirements of the destination country at an eligible medical institution.• Declare that you are using the IATA Travel Pass and receive your test results and proof of vaccination in the application (stored in HEALTH). <p>➡The app checks against the entry requirements of the destination country and determines whether or not the user can travel.</p>

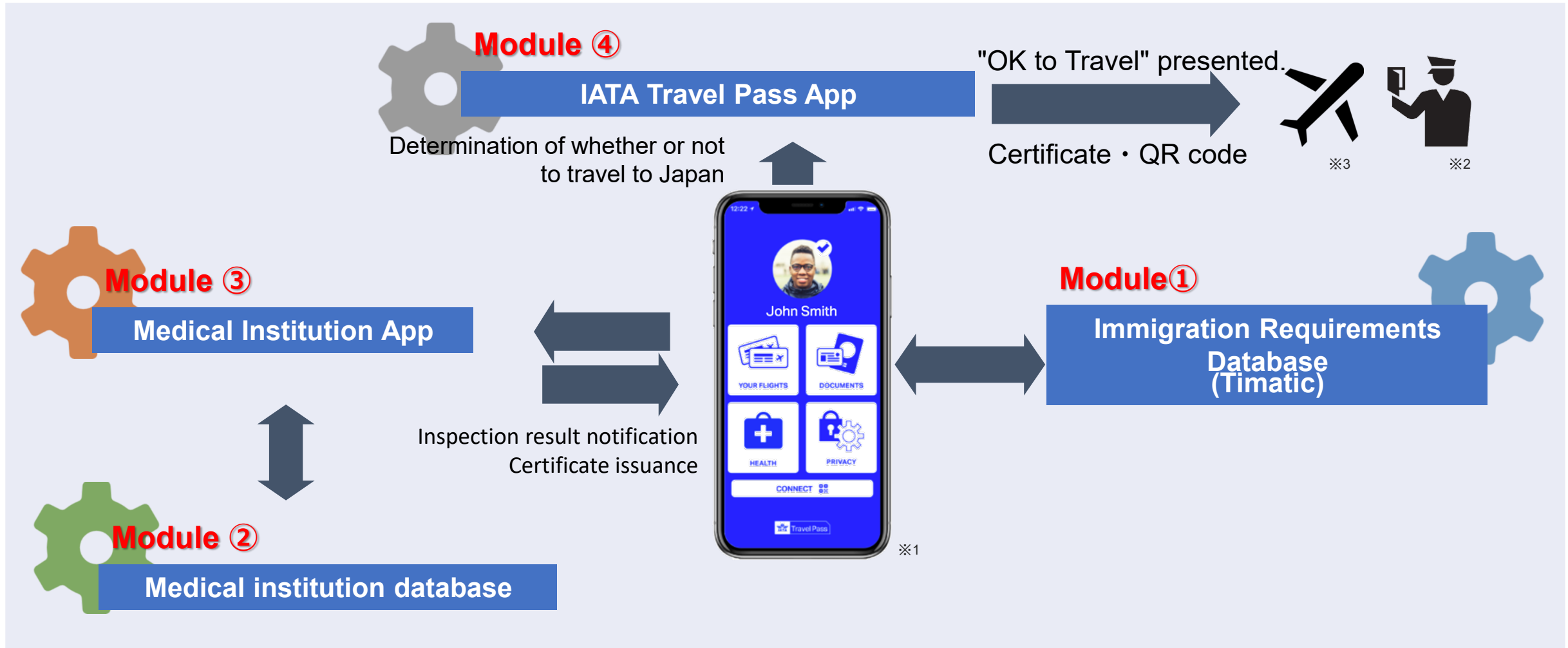
3. IATA Travel Pass Example

How to use the IATA Travel Pass

Departure Airport	Check-in 	<ul style="list-style-type: none">At the check-in counter at the airport, present the app along with your passport and other necessary travel documents to the attendant to check in for your flight.
Arrival Airport	Immigration procedures 	<ul style="list-style-type: none">At the time of immigration, present the app along with your passport and other necessary travel documents to the immigration officer to complete immigration procedures.

3. IATA Travel Pass Example

IATA Travel Pass 4 Features



※Prepared by the author based on data published by IATA.

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3. IATA Travel Pass Example

IATA Travel Pass 4 Features

Module ①
Entry requirements Database
(Timatic)

- Database of up-to-date entry requirements (including new coronavirus testing requirements) for each country using IATA Timatic

Module ②
Medical institution Database

- Database of medical institutions that can perform the tests.
- Users can search for medical institutions that can provide the necessary tests for travel.

3. IATA Travel Pass Example

IATA Travel Pass 4 Features

Module ③ **Medical** **institution** **App**

- The medical institution application can only be used by medical institutions registered in module ②.
- Digital certificates of test results, vaccinations, etc. sent from medical institutions to the IATA Travel Pass app

Module ④ **IATA** **travel pass** **App**

- Storing passport information
- Storage of digital certificates sent by medical institutions (in the , it will be possible to read and store vaccination certificates using QR codes)
- Determine whether or not to travel by checking against the destination's entry requirements.
- The user presents the result of the app's decision on whether or not to travel, as well as certified documents, to the airline and immigration officials.

4. Issues

4. Issues

Issue①	Digital health platforms in disarray, lack of interconnectivity
Issue②	Entry/exit restrictions and quarantine measures for vaccinated persons
Issue③	Specimen collection methods (nasopharyngeal swabs, saliva, etc.) are not uniform internationally.
Issue④	Protection of personal information related to negative test certification, vaccine certification, etc.
Issue⑤	Digitization of the certificate verification process at immigration checkpoints

4. Issues

Issue①

Digital health platforms in disarray, lack of interconnectivity

Problem: • Transit passengers across multiple airlines and platforms are
Multiple apps will be needed.
• To airlines with different platforms No through check-in.

Countermeasures: • **Unification of wallet specifications** or
Introduction of multi-wallet readers

Effect: • Users only need to keep necessary documents in one wallet.
• Airlines can support all wallets and platforms.

4. Issues

Entry/exit restrictions and quarantine measures for vaccinated persons

Problem: • The number of vaccinated people is within the limit of 2000 people/day arriving in Japan.
• Vaccinated patients are also subject to voluntary quarantine for 14 days upon arrival in Japan.

Countermeasures: • Limit the number of **vaccinated people** arriving in Japan and Removed from voluntary quarantine for 14days
• For **those who test negative**, the country of origin is classified as high risk or low risk
Make quarantine measures at the time of entry into Japan more effective(For example, standby at a designated facility vs. standby at home/accommodation)

Benefits: • Easier overseas business trips for Japanese and temporary return to Japan for expatriates
• Increase in the number of passengers visiting Japan is expected.

Issue②

4. Issues

Issue③

Specimen collection methods (nasopharyngeal swabs, saliva, etc.) are not uniform internationally.

Problem: • Negative test results from an undesignated specimen caused confusion at the departure airport. Another case of refusal to enter Japan.
• Some of the negative certificates issued by overseas medical institutions do not include the specimen.

Countermeasures: • **Eliminate the designation of anything** other than testing methods (PCR test, antigen test, etc.)

Effect: • Problems related to the method of collecting test specimens for negative certification are resolved.

4. Issues

Issue④

Protection of personal information related to negative test certification, vaccine certification, etc.

Problem: • Personal information such as inspection certificates cannot be registered in the system without the consent of the individual.

Countermeasures: • **Storage** of personal information such as inspection certificates in personal **smartphones**.
Transmission to airline systems, etc. based on the consent of the individual

Effect: • Personal information can be placed under the complete control of the user.
(de-centralization)

4. Issues

Issue⑤

Digitization of the certificate verification process at immigration checkpoints

Problem: • The app will output the immigration screening, which is all paper-based.

Too big a gap to replace with just "OK to travel."

Countermeasures: • Even at the immigration checkpoint, **countermeasures for issue ①** are necessary first.

• **Electronic screening** through advance transmission of digital certificates, etc.

Effectiveness: • By promoting digitization through step-by-step evaluations, we will be able to Replace with "OK to travel" in the final output of the app.

**Thank you very much for your
attention.**