State of Affairs of Travel & Tourism and What is Needed for a Smooth Recovery

3rd Status Report

Arab Air Carriers’ Organization 31 August 2020
Impact Analysis on the Economy and Travel & Tourism
A deeper downturn than originally expected: 4.9% contraction in GDP in 2020 over 2019

In January 2020, the IMF released the initial global economic forecast for 2020 expecting better output when compared to 2019 supported by easing trade tensions between the U.S. and China and diminished fears of a no-deal Brexit. However, COVID-19 triggered the worst economic recession since the “Great Depression.” During Q1 2020, several countries introduced strict lockdown measures, causing a severe fallout in business activity. Accordingly, the IMF revised the forecast in April, where the global economy was expected to shrink by 3.0% in 2020 over 2019.

Further data releases since April suggested even a deeper downturn, especially in consumption and services output, affected by social distancing, lockdowns, income losses, and weaker consumer confidence. Moreover, the spike in infections, especially across the Americas led the IMF to revise their forecast on June 24, where global GDP was forecasted to shrink by 4.9% in 2020 over 2019. The global economy is forecasted to lose USD 12.5 trillion in output in 2020 and 2021 that could have been achieved based on January’s forecast. Estimates could have been worse without the existence of sizable fiscal and financial countermeasures taken by many countries since the beginning of the crisis.
Estimates of Time for Recovery of the Global Economy from COVID-19 Crisis

Recovery by end of 2021 under the best-case scenario; By 2023 under worst-case scenario

Based on the updated data released during the first half of 2020, we have updated our recovery scenarios for the global economy.

Despite the weaker than anticipated figures of consumer spending and manufacturing activity released during the first half of 2020, we still estimate that the global economy will recover to 2019 levels by the end of 2021 based on our best-case scenario (see left chart).

The best-case scenario assumes, continued financial support provided by governments, a drop in the rate of infections, increase in manufacturing activity, ease of trade tensions, and recovering commodity prices.

On the other hand, our worst-case scenario assumes limited financial support by governments, another global spike in infections, which will force governments to reinstate lockdowns causing more businesses to fail, elevated trade tensions, and a drop in commodity prices.

Considering the worst-case scenario, the economy is forecasted to return to 2019 levels in 2023 (see left chart).
COVID-19: Estimates of Impact on the Arab World Economy

A deeper downturn than originally expected: 5.7% contraction in GDP in 2020 over 2019

According to the October 2019 forecast released by the IMF, the Arab world economy was expected to perform well in 2020, with GDP growing by 3.3% over 2019 (1.4 percentage points increase compared to 2019 growth). Moreover, the increase in oil prices by the end of 2019 supported the outlook. However, as COVID-19 cases scaled-up in 2020, countries-imposed lockdown measures causing severe damage across all sectors of the economy. Also, oil exporting economies witnessed a notable drop in oil revenues due to the drop in oil prices reflecting weaker global demand. Therefore, the IMF revised the outlook for the region in April 2020, where GDP was expected to contract by 2.7% in 2020 over 2019.

With countries reducing domestic lockdown measures gradually, infections continued to increase. At the same time, oil demand and prices remained low, and the travel and tourism sectors continued to suffer from the repercussions of the pandemic. Accordingly, the IMF revised the outlook for the region in July, GDP is expected to contract by 5.7% in 2020 over 2019. The Arab economy is forecasted to lose around USD 900 billion in output between 2020 and 2022 that could have been achieved based on October's forecast. Results could have been worse without the fiscal support provided by governments in the region.
Estimates of Time for Recovery of the Arab World Economy from COVID-19 Crisis

Recovery in 2022 under the best-case scenario; In 2023 under worst-case scenario

As for the Arab world, in our previous best-case scenario, we forecasted that the region's economy will recover to 2019 levels in 2021. However, the impact of the dual-shock (the pandemic and the drop in oil prices), caused more damage than expected, leading to a contraction in trade and a collapse in oil revenues, travel and tourism, and remittances.

Considering best-case scenario, the Arab world GDP is expected to recover to 2019 levels in 2022, assuming that average oil prices would stay between USD 45 to 50 in 2021 and 2022.

However, considering worst-case scenario, Arab world GDP will not recover to 2019 levels before 2023, assuming an average oil price in 2020 of around USD 36 (given the sharp drop early in the year) and maintain an average of around USD 43 in 2021 and 2022.

The outlook in the region remains highly related to the changes in the global oil markets, noting that oil revenues represented on average around 65% of the Arab world nominal GDP in 2019.
The first half of 2020 witnessed a huge drop in traffic measured in RPKs and capacity measured in ASKs for the airline industry as a result of the stringent measures implemented by states to curb the spread of COVID-19.

Global RPKs and ASKs witnessed the steepest monthly year-on-year decline in April 2020 over April 2019 contracting by 94.3% and 87.0% respectively, as air travel activity came to nearly a complete stop due to border restrictions.

As countries began to relax some restrictions in June 2020, passenger traffic and capacity offered slightly improved. Global RPKs and ASKs contracted by 86.5% and 80.1% respectively in June 2020 over June 2019. The improvement was mainly attributed to domestic traffic, as across several major domestic markets travelers can commute freely with no restrictions. The overall decline in RPKs and ASKs in H1-2020 compared to H1-2019 reached 58.4% and 51.0% respectively.

Estimates for the second half of the year remain positive as travel activity resumed in most areas of the world (see left chart). Total year RPKs and ASKs in 2020 are forecasted to decline by 54.7% and 40.4% respectively when compared to 2019.
Estimates of Time for Recovery of Global Traffic from COVID-19 Crisis

Recovery by 2024 under the best-case scenario; By 2027 under worst-case scenario

Similar to the global economy, we have updated our estimates for the recovery period of travel. Data sets were updated considering the data released during the first half of 2020.

In our previous study and based on our best-case scenario, we forecasted that passenger traffic, measured in RPKs will recover to 2019 levels by 2023. However, relying on the data released during H1-2020 and the change in market dynamics, we now estimate that passenger traffic will recover to 2019 levels by 2024.

The updated best-case scenario assumes, economies recovering gradually, the wide-use of technology in the travel journey, harmonious and risk-based health measures used by states, a vaccine is widely available by the end of 2021, or the virus dissipating by that time.

On the other hand, our worst-case scenario assumes that economies will witness a slow recovery, lack of passenger confidence in travel due to excessive health measures and limited use of touchless technology, a global spike in infections, and the availability of a vaccine will take more than 18 months.

Considering this scenario, passenger traffic is expected to return to 2019 levels by 2027.
Change in Traffic for AACO Members in 2020 Compared to 2019, Based on H1-2020 Data

Total year’s decline in RPKs and ASKs is forecasted to reach 57.1% and 34.0%

Despite the good start in 2020, AACO members took the hit from the global pandemic. Passenger traffic measured in RPKs declined by 49.0%, and 97.3% in March and April 2020 respectively when compared to 2019.

A tick-up in traffic was expected in June 2020, yet most Arab countries were still witnessing an increasing level of infections causing authorities to keep travel restrictions in place, which weakened the recovery process.

Overall, passenger traffic measured in RPKs contracted by 55.5% and capacity offered measured in ASKs by 51.1% in H1-2020 compared to H1-2019.

As for the second half of 2020, demand is expected to improve gradually as restrictions are relaxed and passengers regain confidence to travel.

Total year decline in RPKs and ASKs is forecasted to reach 57.1% and 34.0% respectively in 2020 compared to 2019.
Estimates of Time for Recovery of AACO Members’ Traffic from COVID-19 Crisis

Recovery by 2024 under the best-case scenario; By 2027 under worst-case scenario

The updated scenarios discussed earlier were applied on the updated data set for the Arab airlines.

Considering the best-case\(^1\) scenario passenger traffic is expected to recover to 2019 levels by 2024. However, considering the worst-case\(^2\) scenario, the recovery to 2019 levels is forecasted to be extended until 2027.

The outlook remains highly uncertain considering the continuous change in market dynamics.

\(^1\)Economies recovering gradually, the wide-use of technology in the travel journey, harmonious and risk-based health measures used by states, a vaccine is widely available by the end of 2021, or the virus dissipating by that time.

\(^2\)Economies will witness a slow recovery, lack of passenger confidence in travel due to excessive health measures and limited use of touchless technology, a global spike in infections, and the availability of a vaccine will take more than 18 months.
### Estimates of Impact on Airports' Passenger Traffic per Quarter for 2020*

<table>
<thead>
<tr>
<th>Region</th>
<th>Q4</th>
<th>Q3</th>
<th>Q2</th>
<th>Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>World</strong></td>
<td>-89.6%</td>
<td>-68.9%</td>
<td>-49.5%</td>
<td>-26.3%</td>
</tr>
<tr>
<td><strong>North America</strong></td>
<td>-89.0%</td>
<td>-69.0%</td>
<td>-59.4%</td>
<td>-19.1%</td>
</tr>
<tr>
<td><strong>Middle East</strong></td>
<td>-97.4%</td>
<td>-76.1%</td>
<td>-49.8%</td>
<td>-16.1%</td>
</tr>
<tr>
<td><strong>LAC</strong></td>
<td>-93.1%</td>
<td>-74.2%</td>
<td>-63.8%</td>
<td>-15.3%</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td>-96.3%</td>
<td>-74.4%</td>
<td>-49.7%</td>
<td>-23.2%</td>
</tr>
<tr>
<td><strong>Asia-Pacific</strong></td>
<td>-82.7%</td>
<td>-61.4%</td>
<td>-40.5%</td>
<td>-36.3%</td>
</tr>
<tr>
<td><strong>Africa</strong></td>
<td>-97.4%</td>
<td>-76.1%</td>
<td>-50.1%</td>
<td>-18.5%</td>
</tr>
</tbody>
</table>

*Change is compared to the pre-COVID-19 forecast scenario

Source: ACI

Airports' operations took the hit from the COVID-19 pandemic. Looking at the drop in airports' passenger traffic, **Q2-2020 witnessed the deepest contraction as most lockdown measures were implemented by the end of March and until early June 2020.**

**Two regions took the highest hit in Q2-2020 namely Africa and the Middle East** compared to the originally forecasted scenario (pre-COVID-19), with passenger traffic declining by **97.4% for each of the two regions**, followed by Europe 96.3%, Latin America and the Caribbean (LAC) 93.1%, North America 89.0%, and finally Asia-Pacific 82.7%.

The impact is forecasted to be much less during Q3 and Q4 2020 when compared to the originally forecasted scenario as border restrictions started to ease in June 2020.

Overall, **global airport passenger traffic is forecasted to decline by 59.6% in 2020 compared to the pre-COVID-19 forecast scenario**, a **9.3 percentage points downward revision** compared to the estimates released by the Airports Council International (ACI) during May 2020.

LAC: Latin America and the Caribbean
Global Fleet Status

The number of in-service aircraft started to increase in early June 2020

Reflecting the drop in demand, airlines started increasing aircraft storage activity.

Storage activity picked up by the end of March 2020, where most passenger traffic was halted due to border restrictions. **By the end of March 2020, more than 17% of the global fleet was non-operated** (see left chart), which is equivalent to 5,830 aircraft.

In April and May 2020, the total number of non-operated aircraft reached 17,035 and 18,679 aircraft respectively, which represented more than half of the global fleet. The total number of non-operated aircraft in May 2020 was 4 folds larger than the number of non-operated aircraft in the aftermath of 9/11 and the global financial crisis.

The number of in-service aircraft started to increase in early June 2020, where many countries partially reopened their skies. **The total number of in-service aircraft reached 17,231 (50.9% of the global fleet) in June 2020.** The situation improved further in July and August, where the number of in-service aircraft reached 62.7% and 68.1% respectively of the total global fleet, which is equivalent to 21,213 and 23,046 aircraft. The number of in-service aircraft is expected to remain steady for the upcoming months if the situation maintains status-quo.

*Data is as of the first week of each month, aircraft having a maximum take-off mass of less than 9,000 kg (20,000 lbs) are not included

Source: Cirium Fleets Analyzer, AACO
AACO Members’ Fleet Status

In July, the number of in-service aircraft rose to exceed those that are non-operated, for the first time since April 2020.

As the lockdown measures in the Arab region gained traction across countries, AACO members started parking their aircraft at a similar pace, to ensure proper parking conditions are being met.

The number of non-operated aircraft started to increase since the beginning of April 2020, to reach 1,148 by end of the month, which is equivalent to 77.5% of the total fleet. Similarly, in May and June, where the share of non-operated aircraft from the total fleet reached 73.4% and 65.3%, respectively, of the total fleet.

Looking at July, the number of in-service aircraft rose to exceed those that are non-operated, for the first time since April 2020. The total number of in-service aircraft reached 782, which is equivalent to 52.3% of the total fleet. Similarly, as restrictions eased further in August, the number of aircraft returning to service increased to reach 933, which is equivalent to 62.0% of the total fleet.

Total in-service aircraft are expected to reach around 68.0% of the total fleet in September 2020, as more members are expected to resume operations.
Estimates of Full Year Impact of COVID-19 Crisis on Tourism

We estimate tourism receipts to drop by 68.0% in 2020 compared to 2019, to reach USD 474 billion.

Tourism weakened more than expected during the first half of 2020 when compared to 2019. Therefore, we estimate international tourist arrivals now to decline by 64.7% in 2020 compared to 2019, which represents 6.7 percentage points downward revision compared to our previous forecast scenario (best-case scenario) released in May 2020. International tourist arrivals are forecasted to decline by 64.7% in 2020 compared to 2019, representing 6.7 percentage points downward revision compared to our previous forecast scenario (best-case scenario) released in May 2020.

In line with the revision for international tourist arrivals, we have modified our estimates for international tourism receipts. International tourism receipts are expected to decline by 68.0% in 2020 compared to 2019.

This will reduce the multiplier effect of tourism within the economy, especially in developing countries which heavily rely on tourism as a source of job creation and national income.

As a result, we expect a drop in capital investment related to travel and tourism by around 73.0% in 2020 compared to 2019.
Similar to travel, the recovery in tourism activity is highly related to economic recovery and the length of the pandemic.

Similar to global travel demand, tourism activity measured in international tourist arrivals, is forecasted to remain below 2019 levels until 2024, if the recovery path follows the best-case scenario discussed earlier (see left chart).

However, if the recovery path follows the worst-case scenario, discussed earlier, international tourist arrivals will need until 2027 to reach 2019 levels (see left chart).

Similar to travel, the recovery in tourism activity is highly related to economic recovery and the length of the pandemic.

The longer the recovery period, the more the adverse impact will continue to cascade on other sectors of the economy, including travel, retail, food and beverage, capital inflows, and investment.
Estimates of Full Year Impact of COVID-19 Crisis on Tourism in the Arab World

We estimate tourism receipts to drop by 69.1% in 2020 compared to 2019, to reach USD 28 billion.

Based on the results reported during the first half of 2020, we have updated our estimates concerning the decline in international tourist arrivals to the Arab region in 2020 when compared to 2019.

In our previous releases, we forecasted a drop of 55.0% in international tourist arrivals to the region in 2020 over 2019 (according to our best-case scenario). However, based on recent data releases, we estimate a 65.6% drop in international tourist arrivals to the region in 2020 over 2019. The total number of tourists is expected to reach 31 million in 2020.

In line with the updates for tourist arrivals, we have also modified our estimates for tourism receipts. We estimate tourism receipts to drop by 69.1% in 2020 compared to 2019, to reach USD 28 billion.

The steep decline in overall tourism activity in the region will cause a cascading effect on several sectors including retail, food and beverage, hospitality, and financial services. Moreover, the expected drop will lead to many job losses.
Tourism activity in the Arab world measured in international tourist arrivals was one of the most affected sectors in the economy, as it mainly relies on air transport with the limited availability of other modes of transport.

International tourist arrivals to the Arab world are forecasted to remain below 2019 levels until 2024, if the recovery path follows the best-case scenario discussed earlier (see left chart).

On the other hand, if the pandemic intensifies and other related industries continue to suffer from its repercussions, the recovery path is expected to follow the worst-case scenario, where international tourist arrivals to the Arab world are forecasted to remain below 2019 levels until 2027.

This will have socio-economic impacts on many countries in the region, where the tourism sector is a key contributor in supporting jobs and generating national income.

Data Points Compared to Base Year 2019 (Last Normal Year Before the Crisis)*

*Measured using international tourist arrivals, doted lines are estimates

Source: AACO and Various Sources
As air travel and tourism reported weaker than anticipated results during the first half of 2020 compared to 2019, we expect a deeper hit on the economic and social benefits of tourism in all regions.

Considering the updated aspects, we estimate a total loss of around USD 5.5 trillion in total contribution of travel and tourism to global GDP. Therefore, the total contribution of travel and tourism in global GDP is forecasted to reach around USD 3.4 trillion in 2020, which represents a decline of 62.3% when compared to 2019.

As for our estimates for the Arab world, in our previous studies, we forecasted a loss of around USD 130 billion in total contribution of travel and tourism to Arab GDP in 2020 compared to 2019. However, based on the updated data released during the first half of 2020, we now estimate that the contribution of the travel and tourism sector in the Arab world GDP to be less by USD 194 billion in 2020 compared to 2019.

Therefore, the total contribution of travel and tourism in the Arab world GDP is forecasted to reach around USD 72 billion in 2020, which represents a decline of 72.9% when compared to 2019.
Similar to previous recessions, the decline in economic activity comes with a hit to the labor market. Based on several indicators, it is forecasted that the global unemployment rate will reach around 10.0% in 2020, which will result in a loss of around 346 million jobs.

Several sectors including travel and tourism suffered heavy financial losses due to the pandemic, leaving most of their workforce jobless. More than half of the forecasted job losses in 2020 are attributed to the travel and tourism sector (57.1%, see left chart), where around 197.5 million jobs are forecasted to be lost on the global level.

As for the Arab world, in our previous studies, we forecasted a loss of around 4 million jobs in the travel and tourism sector, yet considering the new dynamics, we now estimate a loss of around 7.5 million jobs. Total job losses in the travel and tourism sector represents around 48.0% of the total unemployment number that is forecasted to be registered in the Arab region in 2020 (see left chart).
Global airlines are forecasted to lose around USD 419 billion in revenues, whereas financial support stands at USD 126 billion. So far, aggregated state support packages globally reached around USD 126 billion, which represents around 30% of the overall forecasted losses for the aviation industry.

On the regional level, the highest level of support was noticed in the Americas, mainly due to the CARES act in the United States, which provided USD 58 billion in support for the airlines. The total support represents around 45.0% of the total forecasted losses for airlines in the Americas.

In second place comes Europe, where the total support package dedicated for airlines reached around 38.8% of total forecasted losses, followed by Asia-Pacific around 17.8%, Sub-Saharan Africa around 8.2%, and finally the Arab world around 2.3%.

More support is needed to minimize the impact of the loss and allow airlines to overcome this crisis to support the recovery of the economy.

Source: Ishka, IATA, AACO
Air Transport Ecosystem is Safe

Adhering to ICAO ‘Take-Off’ document ensures several layers of prevention and protection, with technology to provide touchless processes, where possible.
Following the publication of AACO’s roadmap for the safe restart of air travel based on best practices in ICAO’s CART “Take-off Document” for the recovery of air transport, AACO highlighted that the foundation of a successful recovery of Travel & Tourism will depend on the following:

1. Governments' embrace of the value of Travel & Tourism through applying proportionate measures to mitigate the spread of the virus and hence reduce the time of transition to normalcy.

2. Regaining passenger confidence in the mitigation of COVID-19 exposure in air travel.

3. Facilitating passengers’ confidence through the deployment of touchless technologies.
Recommendations of WHO, ICAO, and Arab Tourism Organization

On 1 June 2020, ICAO published the COVID-19 report and guidelines produced by the Council’s Aviation Recovery Task Force (CART). They were developed through broad-based consultations with countries and regional organizations, and with important advice from the World Health Organization, IATA, ACI World, CANSO, ACAO, ICCAIA and others.

The report’s ‘Take Off’ document contains guidelines for public health risk mitigation measures and four separate modules relating to airports, aircraft, crew, and air cargo.

On 17 August 2020, ICAO announced that IATA has launched a checklist that aims to support airlines who want to implement the ICAO CART guidelines through self-assessments, while ACI has launched its “Airport Health Accreditation programme,” which assesses airports’ health measures and procedures against the CART recommendations.

In May 2020, the Arab Tourism Organization published two sets of recommendations:

- Measures for tourists to resume tourism in a safe manner.
- Measures for touristic establishments to ensure a safe resumption of touristic activity in the Arab world.

“…Bans on international travel cannot stay in place indefinitely …Only with strict adherence to health measures, from wearing masks to avoiding crowds, would the world manage to beat the COVID-19 pandemic…”
Air Travel is Not a Spreader of the Virus

- Overwhelming majority of new COVID-19 cases are locally contracted.
- Air travel, with the preventive measures, is not a cause of further spread.
- Quarantine doesn’t help in mitigating the virus

* Based on an 11-country survey conducted by IATA and Rockland Dutton, and other sources
Regaining Travelers' Confidence: Are We There?

Travelers' Confidence in the travel and Tourism sector is dependent on:

1. Trusting the system
   A vital element for restoring travel
   - Still needs lots of work

2. Receiving clear & unified measures
   - Avoid quarantine, double disinfection & border closure
3. Applying reasonable proportionate measures
   - Measures are fragmented: they vary from one country to another
Bio-Security Measures
Governments to take proportionate measures to the threat of exposure

Avoid Quarantine
As it is not a biosecurity measure.

Upstream Prevention
Implement measures to ensure COVID-19 free before start of travel

Masks
Wearing masks and face covering prevent transmission

Awareness to Passengers
What is needed and that transmission on board is not a risk

Lifting Borders Restrictions
Operations resume based on Air Services Agreements between states – Not Corridors or Bubbles

Touchless Travel
Deploy technology that eliminates physical contact to avoid transmission

Social Distancing
Ensure at airports

Principles to Restart Travel & Tourism and Restore Confidence
The Role of Technology in Restarting Air Transport

Public Health measures alone will not suffice in restoring and restarting air travel

- This pandemic is truly unprecedented in terms of scope and reach. It is one that has impacted virtually all industries, with air transportation taking the strongest hit.
- Despite implementing Public Health measures in order to loosen up lockdowns, the global community failed to contain the virus as some countries were late to respond and borders remain closed for nearly 85 countries around the world.

Technology plays a fundamental role in diminishing physical touch

- Facial recognition & biometrics exceptionally fast-track the airport process and make it more seamless.
- Touchless technologies grant travelers the ability to interact with kiosks using their mobile phones, thereby containing physical transmission of the virus.
- Traveler data collection can be further expedited using online format.
- Governments can collect, analyze, and properly disseminate health information from inbound and outbound travelers rapidly and efficiently, thus managing the movements of infectious cases at home and aiding the global efforts in tracking information.

The COVID-19 crisis brought about a true opportunity for a much-needed change, one that will elevate air travel to a new standard. A more digitized travel process will inevitably lead to:
- Reducing touchpoints and limiting viral spread
- Reducing waiting and queuing time
- Efficiently collecting and managing essential data and health information
- Increasing overall happiness and return business
Technology: Complementing the Travel-Related Processes

Departure Country Flow
- **Pre-Arrival to Airport**
  - Use of Online:
    - Check-in / E-Payment / Ticket Purchase / E-Bag Tags
    - Electronic Health Forms
    - Pre-Order for Duty Free Purchase
- **In the Terminal**
  - Self Check-In Kiosks Using Mobile
  - Self Baggage Drop / Tags
  - RFID Baggage
  - E-Payment of Excess Baggage
- **Passport Control**
  - Substituting Body Search with Body Scanner
- **Security Checkpoint**
  - Possible Repeat of PCR

Arrival Country Flow
- **In the Terminal**
  - Thermal Screening for Disembarking Passengers
- **Boarding**
  - Paperless Boarding Passes (Mobile)
  - E-Boarding Gates with Boarding Face Recognition
  - Push Notifications for Smooth & Safe Distancing while Boarding
- **Waiting Areas**
  - Duty Free Pre-Purchase
  - Duty Free Swipe to Pay
- **In the Aircraft**
  - **Boarding**
  - **Deplaning**
  - **Pre-Order for Duty Free Purchase**
- **Passport Control**
  - Passenger ID Validation Using Biometrics and/or Face Recognition
  - E-Gates That Can Be Equipped with Temperature Check and Controlled with Mobile
- **Exit the Terminal**
  - RFID Baggage Tracking Using Mobile
  - Possible Repeat of PCR
- **Baggage Claim**
  - Use of Online:
    - Check-in / E-Payment / Ticket Purchase / E-Bag Tags
    - Electronic Health Forms
    - Pre-Order for Duty Free Purchase
  
  - Duty Free Pre-Purchase
  - Duty Free Swipe to Pay

Possible Deployment of Technology:
- Self Check-In Kiosks
- Self Baggage Drop
- RFID Baggage
- E-Payment of Excess Baggage
- Substituting Body Search with Body Scanner
- Paperless Boarding Passes
- E-Boarding Gates
- Push Notifications
- Duty Free Pre-Purchase
- Duty Free Swipe to Pay
- RFID Baggage Tracking
- Possible Repeat of PCR
Technology can complement the travel-related processes to achieve safe, seamless & touchless travel.

The traveler expects a more touchless experience.

<table>
<thead>
<tr>
<th>TECHNOLOGY IN THE DNA</th>
<th>AN ALREADY EVOLVING TRAVELER</th>
<th>COVID-19 AND THE NEW NORMAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>The past few years have brought about more behavioral change than ever before.</td>
<td>The rate of technology adoption among travelers globally has been on a geometric increase, with the percentage of people using automated gates or kiosks more than doubling in one year.</td>
<td>The “new normal” that was brought about by the pandemic has further solidified traveler’s expectations of technology.</td>
</tr>
<tr>
<td>Studies show that travelers were rapidly adopting new technology when available &amp; were scoring significantly higher satisfaction rates when doing so.</td>
<td>Recent studies reveal that the striking majority of travelers expect an increased adoption of touchless technology as well as greater use of self-service and automation for passenger processing.</td>
<td></td>
</tr>
</tbody>
</table>

74% of travelers are concerned about queuing at check-in, security, border control, or boarding.

65% of travelers are concerned about handing over passport/phone/boarding pass to airport officials.

84% of travelers believe that touchless processing through the airport will make them feel safer about future travel.
The primary feature which will make such end-to-end integration possible is the creation of a unique biometric key for every passenger which is connected by that individual’s face and biometrics. The information that is currently included in airline tickets, boarding passes, and even passports could then easily be uploaded onto the biometric key with facial recognition used to connect that data to the passenger. This innovation would eliminate queuing at certain check points during the traveler’s journey and could increase the passenger flow in other parts of the airport, where facial recognition might also be used at certain points of transactions. In addition to that, facial recognition will also benefit the travel industry by improving personalization to customers and increasing security at airports. Another area where facial technology has strong potential is data analysis, as reliable information about customers could be collected with businesses then using this data to pick out important trends.
# Conclusions and the Way Forward

## Economy

<table>
<thead>
<tr>
<th>Impact</th>
<th>Action</th>
<th>Still Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total loss in global GDP is forecasted to reach USD 12.5 trillion in 2020</td>
<td>Total stimuli to-date reached around USD 9.0 trillion</td>
<td>A minimum of USD 3.5 trillion to bridge the gap</td>
</tr>
</tbody>
</table>

## Travel

<table>
<thead>
<tr>
<th>Impact</th>
<th>Action</th>
<th>Still Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total airline losses are forecasted to reach USD 419 billion in 2020</td>
<td>Total confirmed support packages to-date reached USD 126 billion</td>
<td>USD 293 billion to bridge the gap</td>
</tr>
</tbody>
</table>

## Tourism

<table>
<thead>
<tr>
<th>Impact</th>
<th>Action</th>
<th>Still Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total loss in tourism receipts is forecasted to reach around USD 1.0 trillion</td>
<td>Support packages for the tourism industry are not yet quantifiable</td>
<td>Support packages dedicated for tourism to be able to bridge the gap</td>
</tr>
</tbody>
</table>

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Economic losses of the Travel and Tourism (T&T) are equivalent to 11.4% of total economic losses. However, job losses for the T&T represents around 57.1% of total forecasted job losses worldwide amounting to 197.5 million.
Conclusions and the Way Forward

Confidence

Reality
• Each State applying its own measures
• Traveler confusion and lack of awareness, leading to further lack of confidence in travel
• Mandatory quarantines, double disinfection, and other burdening measures

Impact
85% of travellers are yet to be encouraged to trust air travel

Remedy
• Follow the international guidelines
• Provide clarity and raise awareness of what is needed from the travelers
• Implement proportionate and reasonable measures

Technology

Reality
In response to traveler’s expectations and concern, airlines and a number of airports started digitizing their processes, where possible.

Impact
• 65% of travelers are concerned about handing over documents to airport officials
• 84% of travelers feel safer if touchless processing through the airport is implemented

Remedy
• Governments to adopt advanced biometric technologies on security, customs, and passport control points.
• The Industry to adopt a standard which allows the integration of passengers’ travel data with the airport biometrics