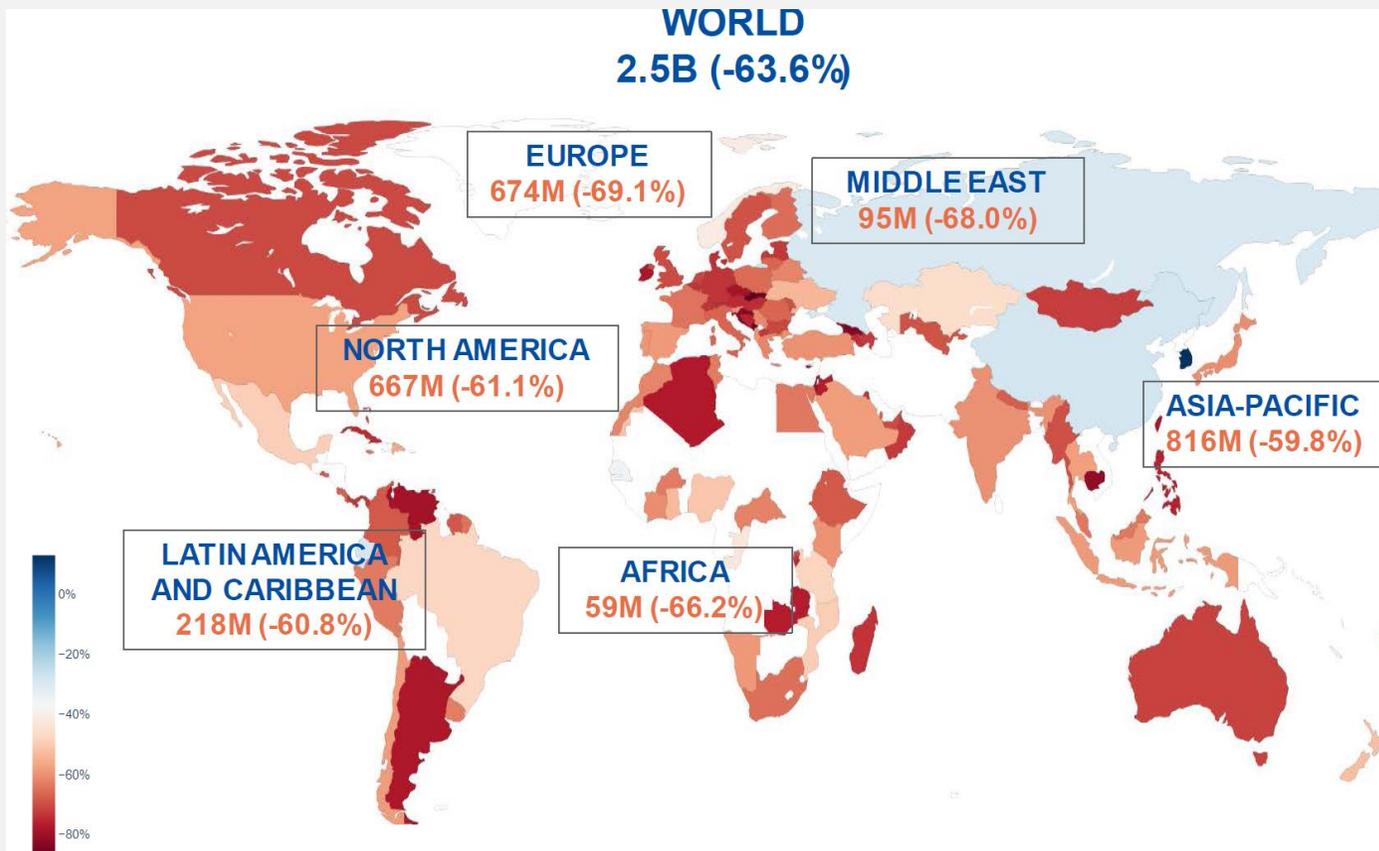


# Smart Airports

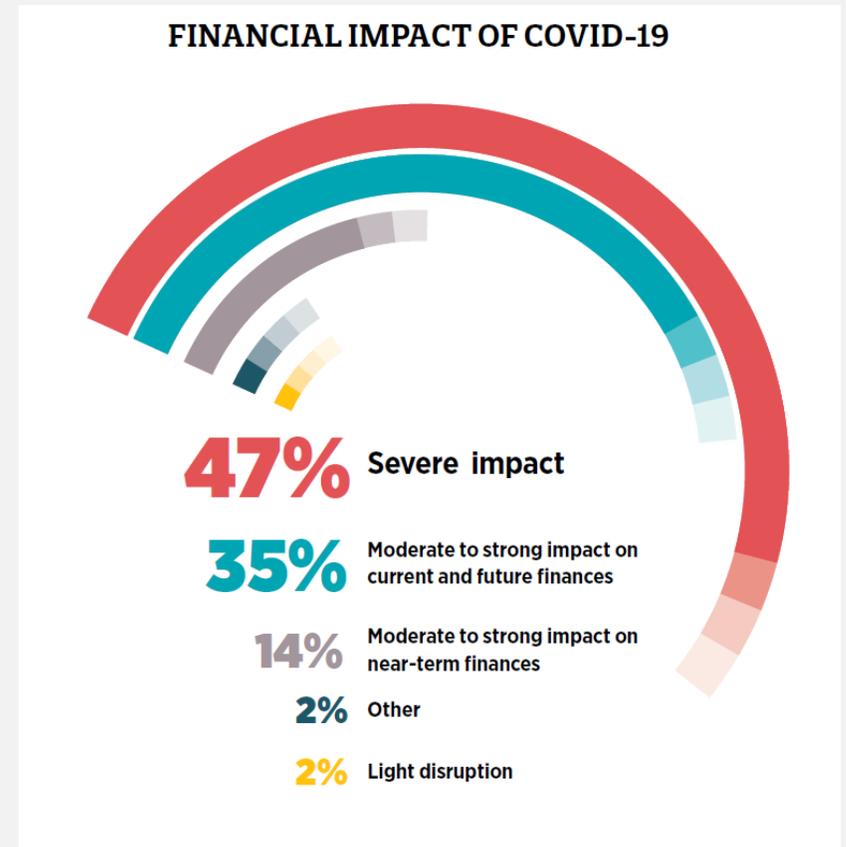
Landrum & Brown | March 2021



# Covid Impact

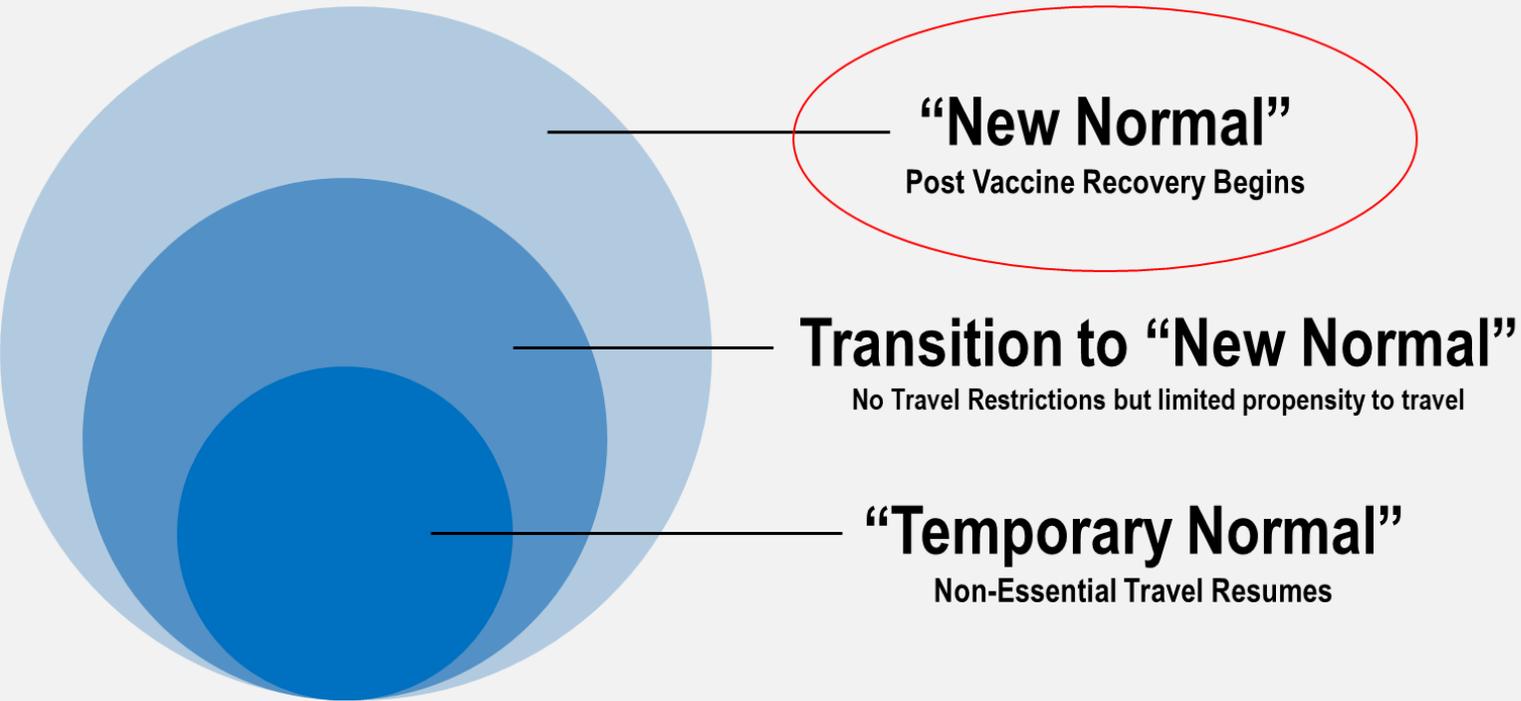


Source: ACI, data till November 2020



Source: Airports International Magazine

# Adapt to the “New Normal”



# Near-Term Objectives



- Restore public confidence that airports and air travel are safe
  - Relies upon State and National health safety guidelines and best practices
  - Relies on the coordinated responses of airports, airlines, government agencies and private businesses
- Manage the airport's response in concert with evolving health-safety guidance
  - Effect on the return of demand
  - Effect on facility capacity
  - Effect on operating costs and revenues
- Refocus the airport business plan
  - Refocus the short-term Capital Programme towards efforts that support the recovery of aviation
  - Maximize the efficiency of operations within health-safety guidance

# Post COVID-19 Operating Context



## DOWNNS

Air Traffic

Facility Utilization

Revenues

CAPEX and OPEX (?)

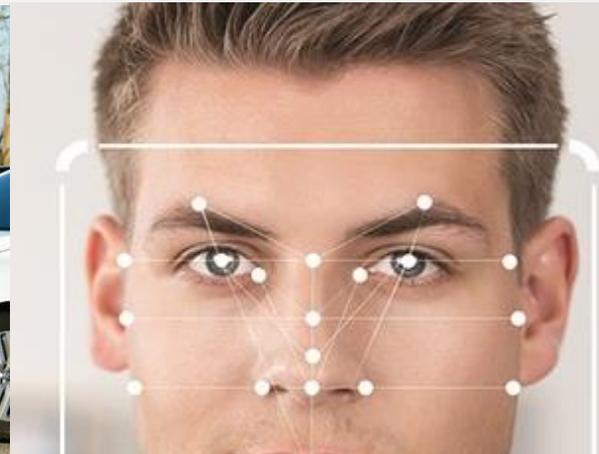
## UPS

Health & Safety  
Requirements

Facilities Capacity (?)

CAPEX and OPEX (?)

# Five years' innovation in five months

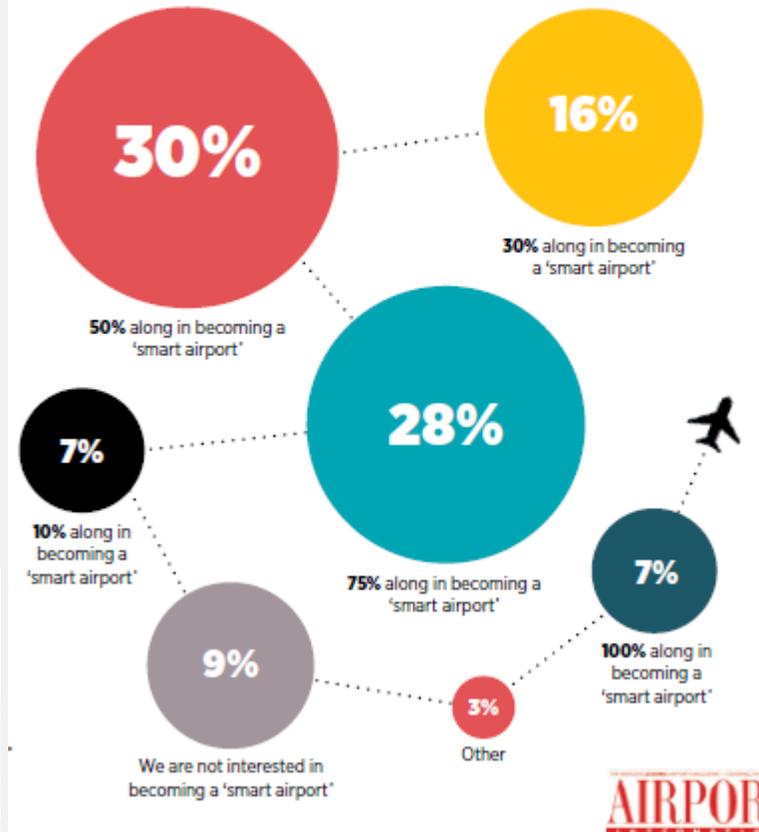


# Smart Airport?

- Tech is transforming the passenger experience. What tech to choose?
- Smart airports focus on their own priorities and evaluate the local context before deciding whether to invest
  - Focus on the customer experience and health
  - Utilise data to manage assets, resources and services efficiently
  - Prioritise long term sustainability in terms of energy/emissions



## HOW FAR ALONG IS YOUR AIRPORT IN BECOMING A 'SMART AIRPORT'?



**AIRPORTS**  
INTERNATIONAL

Source: Airports International Magazine

# Broad Themes

Mobility

- Autonomous Vehicles
- Passenger Drones
- eVOTL

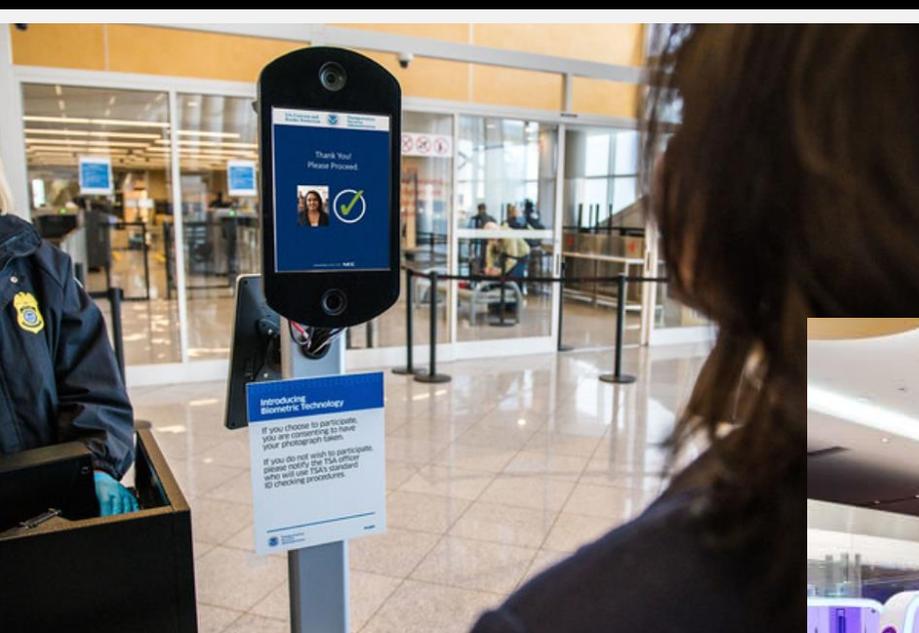
Artificial  
Intelligence

- “Thinking” Airports
- Machine Learning

Alternative  
Processing

- Biometrics - impacts on space and processing
- Baggage Processing revisited

# Alternative Processing



# AI Applications in Airports



- Retail optimization
- Finance and Back of office functions
- Automation
- Recruiting
- Security Screening
- Passenger Profiling
- Baggage Handling System Monitoring
- Trolley Monitoring
- Robotics
- Customer Service / Chat bots
- Human resource and infrastructure utilisation

# Mobility

## Personal Transport

eVOTL



Delivery Drone

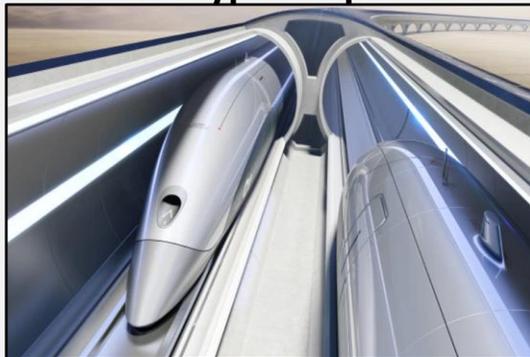


## Ground Transport

Automated Vehicles



Hyperloop



- eVOTL
- Passenger Drones
- Autonomous Cars on Airside and Landside
- Sustainable zero emissions transportation



I HAVE NO SOLUTION BUT.....

I KNOW THAT WE HAVE A PROBLEM.  
WE CAN PROBABLY FIX IT BY INCREASING  
THE AGILITY OF THE TEAM!

-JAN HEMMER-

# CONTACT

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**Debayan Sen**

**[dsen@landrum-brown.com](mailto:dsen@landrum-brown.com)**

+91 9819942721

## **LANDRUM & BROWN**

WeWork, Jogeshwari - Vikhroli Link Rd, Andheri  
East, Mumbai, Maharashtra 400076

585, Defence Colony, New Delhi 110024

