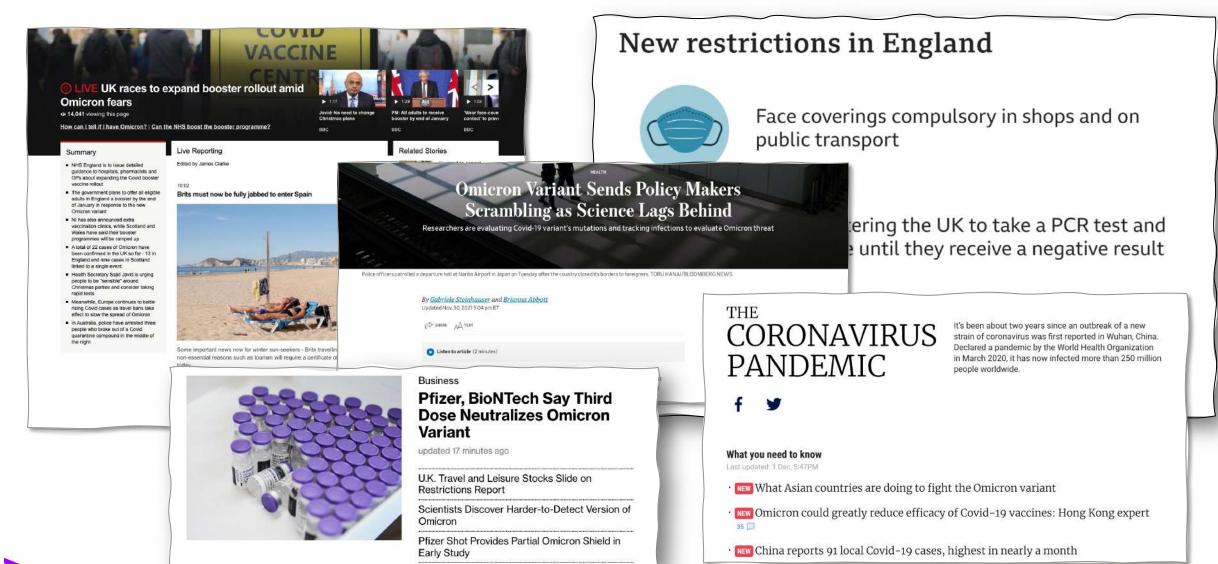


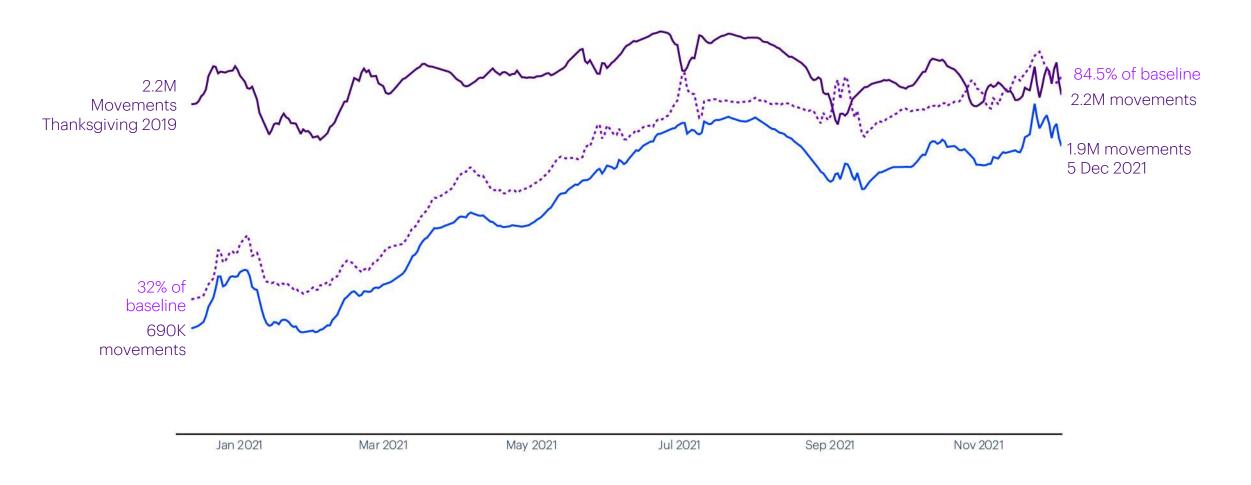
Travel is a quickly changing landscape



The opening of US borders and holiday traffic lifted overall US recovery to 89.5% of pre-COVID at Thanksgiving

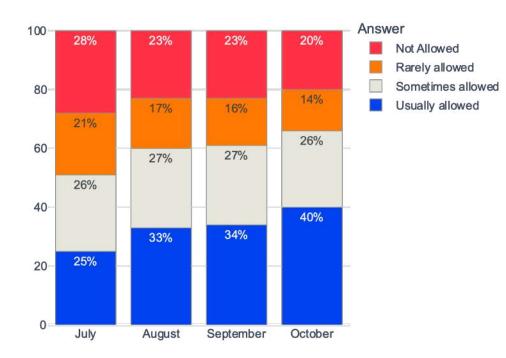
US TSA Checkpoint Movements

7-day moving average vs comparable pre-covid baseline

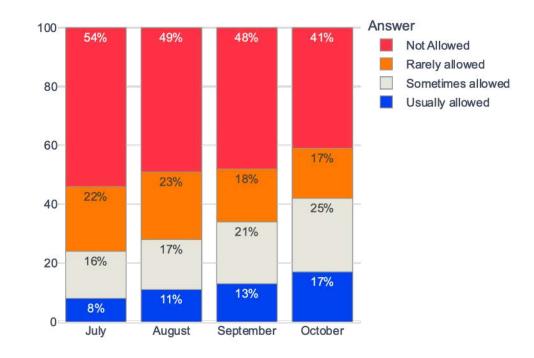


Through October, business travel sentiment and policies were trending positively

Non-essential domestic business trips

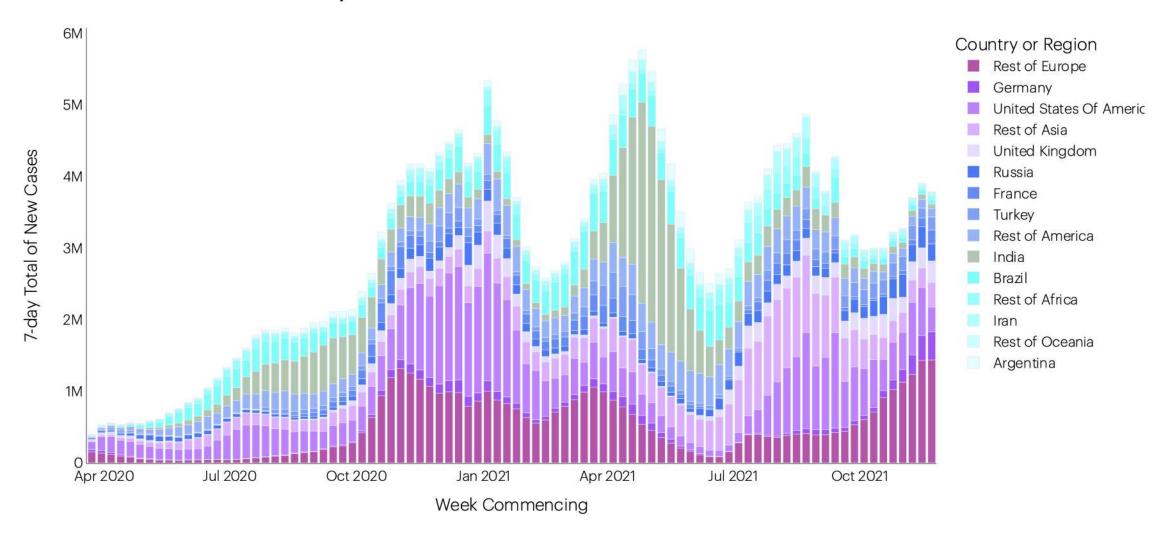


Non-essential international business trips



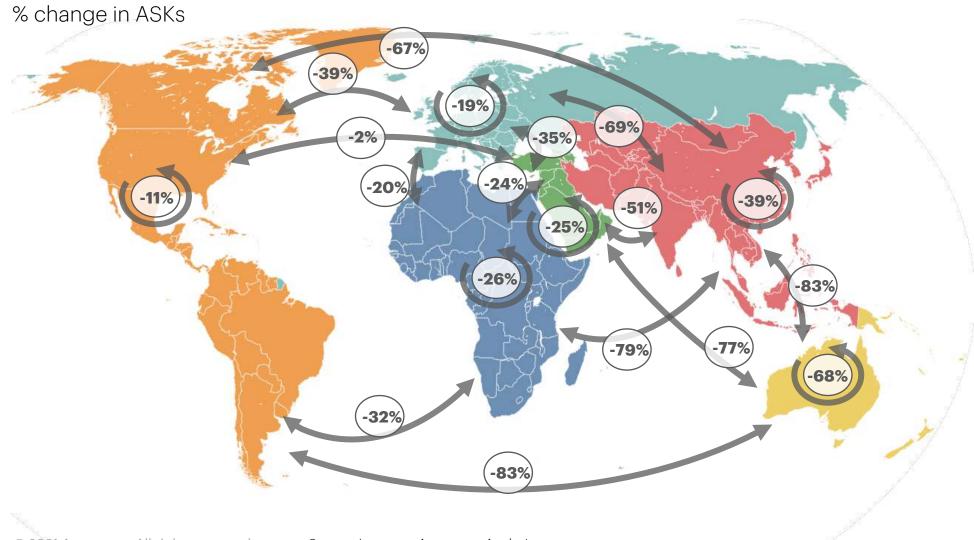
Were we learning to live with COVID...

Global: Total New COVID Cases per Week



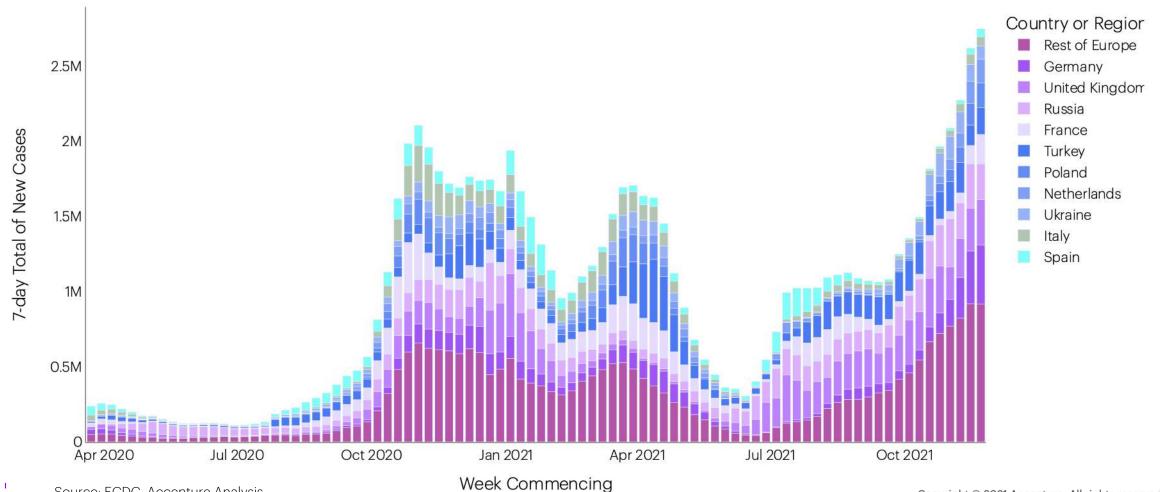
World-wide scheduled capacity was 65% of pre-COVID levels

Scheduled capacity change for week of 15 November



Even in Europe, with all time highs of cases, capacity was only off 20%

Europe: Total New COVID Cases per Week



European and US carriers were ramping up December capacity

Published change in capacity

2021 vs 2019 change by month, in seats as of 15 Nov

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
American Airlines		-42%	-31%	-24%	-20%	-11%	-10%	-12%	-13%	-9%	-4%	-6%
United Airlines		-47%				-33%	-23%	-20%	-17%	-17%	-14%	-13%
Delta Air Lines	-32%	-32%	-32%	-29%	-26%	-24%	-22%	-23%	-18%	-19%	-13%	-16%
Emirates	-67%		-67%	-62%	-61%		-61%	-59%				-38%
Southwest Airlines			-32%	-28%	-23%	-12%	-10%	-7%	-8%	-9%	-9%	-13%
China Southern Airlines	-22%		2%	6%	8%	-14%	-4%	-27%	-4%	-5%	-15%	5%
Qatar Airways				-44%			-38%	-34%	-33%	-32%	-32%	-29%
China Eastern Airlines	-16%	-34%	-5%	-1%	-2%	-6%	-5%	-35%	-15%	-7%	-16%	-7%
Lufthansa	-81%	-86%	-83%	-78%	-76%	-68%	-53%	-49%	-50%	-43%	-38%	-31%
Air China LTD	-20%	-34%	-8%	1%	196	-7%	1%	-27%	-11%	-7%	-21%	2%
Ryanair	-80%	-94%	-94%	-88%	-84%	-47%	-19%	-7%	-6%	-2%	8%	8%
British Airways	-81%	-89%	-87%	-86%	-84%	-79%	-72%	-68%	-56%	-49%	-45%	-38%
Turkish Airlines	-56%	-57%	-51%	-44%		-37%	-16%	-13%	-17%	-15%	-20%	-9%
Air Canada	-78%	-85%	-88%	-86%	-85%	-80%	-71%	-57%	-52%	-50%	-46%	-37%
Air France			-64%	-63%		-49%	-31%	-27%			-28%	-23%
Aeroflot		-59%	-54%		-36%	-23%	-19%	-17%	-18%	-24%	-28%	-23%
Cathay Pacific Airways	-91%	-93%	-96%	-95%	-95%	-92%	-92%	-88%	-87%	-87%	-88%	-84%
LATAM Airlines Group SA	-45%	-49%	-51%	-59%	-54%	-46%	-39%	-36%	-30%	-28%	-22%	-16%
Singapore Airlines	-79%	-77%	-76%	-74%	-72%	-69%	-66%	-66%	-65%	-65%	-60%	-55%
All Nippon Airways Co. Ltd.	-22%	-27%	-57%		-55%	-57%	-54%		-47%			-31%
KLM Royal Dutch Airlines	-51%	-60%		-60%	-57%		-29%	-25%	-29%	-27%	-25%	-20%
EASYJET UK LIMITED	-87%	-91%	-92%	-89%	-87%	-77%	-52%	-38%		-40%	-41%	-31%
Alaska Airlines	-36%	-29%	-25%	-20%	-19%	-18%	-19%	-19%	-14%	-17%	-17%	-20%
Etihad Airways	-65%	-61%	-62%	-61%	-60%	-61%	-63%	-62%	-59%	-56%	-54%	-52%
Qantas Airways Ltd.	-61%			-35%	-29%	-29%		-75%	-75%	-75%	-64%	
JetBlue Airways			-38%	-34%	-21%	-14%	-13%	-12%	-13%	-14%	-14%	-8%
Korean Air Lines	-77%	-75%	-75%	-73%	-72%	-70%	-68%	-69%	-69%	-67%	-67%	-66%
Hainan Airlines	-19%	-49%	-24%	-15%	-16%	-30%	-15%	-42%	-28%	-31%		-24%
Saudi Arabian Airlines Cor	-46%			-47%	-44%	-39%	-30%	-34%	-31%	-29%	-28%	-25%
IndiGo	-9%	-6%	-5%	-12%	-49%		-34%	-22%	-15%	-10%	0%	196
Japan Airlines Co., Ltd.	-50%	-68%	-60%	-48%			-44%	-45%	-48%	-41%	-30%	-20%
Thai Airways Internationa	-96%	-94%	-93%	-93%	-94%	-94%	-91%	-92%	-91%	-95%	-90%	-88%
Iberia	-54%	-61%	-62%		-53%	-42%	-30%	-22%	-28%	-32%	-22%	-19%
Spirit Airlines	-21%	-24%	-14%	-11%	-4%	-5%	4%	5%	5%	6%	6%	11%
Air India Limited	-45%		-37%	-33%	-45%	-58%	-54%	-43%	-42%	-38%	-36%	-32%
EVA Air	-87%	-92%	-91%	-87%	-87%	-89%	-86%	-88%	-90%	-91%	-91%	-90%
Sichuan Airlines	-1%	-28%	14%	9%	16%	9%	8%	-8%	4%	6%	-4%	16%
Ethiopian Airlines Group	-32%	-33%	-34%	-34%	-31%	-29%	-31%	-31%	-31%	-29%	-32%	-26%
Xiamen Airlines	-5%	-20%	9%	7%	5%	4%	3%	-16%	-8%	-12%	-12%	8%
Asiana Airlines	-74%	-71%	-65%	-61%	-61%	-64%	-61%	-67%	-68%	-65%	-64%	-62%
Wizz Air	22%	-79%	-74%	-73%	-65%	-30%	6%	7%	-2%	-3%	-7%	7%

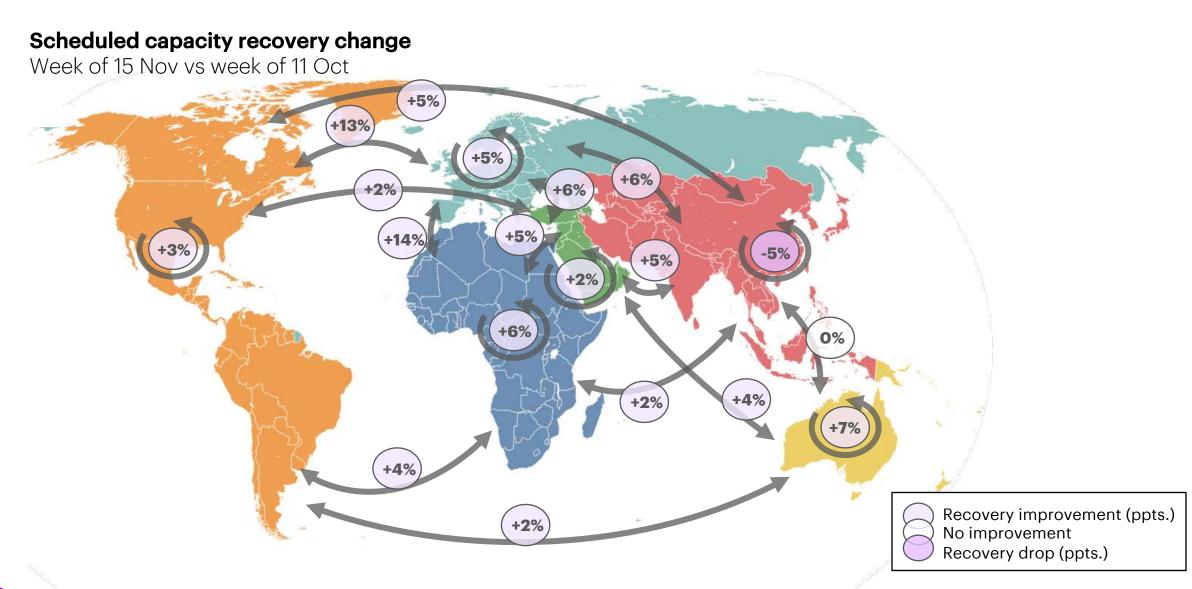
2022 schedules signaled ambition to recover 2019 levels

Published change in capacity

2022 vs 2019 change by month, in seats as of 15 Nov

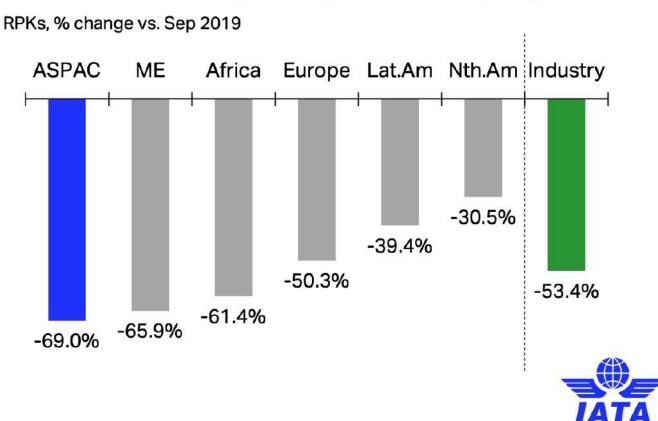
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
merican Airlines	-5%	-3%	16%	19%	16%	15%	16%	14%	18%	17%
nited Airlines	-7%	-3%	-3%	2%	2%	-2%	-1%	0%	3%	0%
elta Air Lines	-9%	-9%	-5%	-1%	-1%	-4%	-4%	-4%	4%	2%
mirates	-34%	-33%	-33%	-21%	-10%	-29%	-27%	-28%	-26%	-25%
outhwest Airlines	-10%	-4%	-4%	-21%						
hina Southern Airlines	7%	5%	12%	15%	15%	14%	4%	2%	8%	8%
atar Airways	-23%	-21%	-20%	-15%	-11%	-13%	-13%	-15%	-14%	-14%
ufthansa	-36%	-34%	-25%	2%	-1%	0%	-1%	1%	-3%	0%
hina Eastern Airlines	-2%	-5%	-2%	-24%	-25%	-26%	-30%	-31%	-27%	-27%
Ryanair	19%	18%	22%	20%	19%	18%	19%	17%	19%	14%
British Airways	-28%	-17%	-15%	-11%	-12%	-11%	-12%	-11%	-11%	-12%
Air China LTD	5%	4%	6%	-6%	-7%	-7%	-11%	-11%	-9%	-8%
ir Canada	-16%	-8%	-7%	0%	2%	1%	-2%	-2%	0%	2%
urkish Airlines	-11%	-14%	-9%	18%	11%	7%	9%	8%	7%	10%
Air France	-13%	-3%	-1%	7%	9%	5%	6%	11%	-3%	-9%
Aeroflot	-24%	-24%	-24%	-31%	-29%	-25%	-24%	-25%	-25%	-31%
Cathay Pacific Airways	-28%	20%	24%	20%	25%	21%	19%	17%	22%	23%
ATAM Airlines Group SA	-5%	-4%	-2%	-1%	-2%	-3%	-15%	-11%	-11%	-14%
lingapore Airlines	-52%	-53%	-41%	21%	17%	18%	18%	18%	17%	17%
All Nippon Airways Co. Ltd.	-18%	-15%	-13%	-5%	-5%	-5%	-8%	-10%	-8%	-6%
(LM Royal Dutch Airlines	-16%	-8%	-6%	2%	0%	0%	-1%	0%	0%	1%
ASYJET UK LIMITED	-34%	-26%	-17%	-6%	-8%	-10%	-10%	-9%	-9%	-6%
Alaska Airlines	-9%	-8%	-6%	-3%	7%	13%	13%	12%	20%	21%
Etihad Airways	-50%	-48%	~41%	-8%	-7%	-10%	-15%	-16%	-13%	-10%
Qantas Airways Ltd.	-14%	-12%	-7%	7%	2%	5%	096	3%	3%	0%
etBlue Airways	0%	4%	-2%	6%	5%	9%	12%	12%	15%	7%
Hainan Airlines	-25%	-32%	-22%	-23%	-24%	-26%	-28%	-29%	-27%	-26%
(orean Air Lines	-57%	-58%	-50%	-13%	-14%	-14%	-15%	-15%	-14%	-8%
Saudi Arabian Airlines Cor	-16%	-15%	-13%	-5%	-8%	-8%	-3%	-6%	0%	2%
ndiGo	26%	26%	25%	21%	19%	20%	17%	18%	16%	5%
apan Airlines Co., Ltd.	-10%	0%	1%	0%	1%	1%	0%	-1%	-1%	-1%
hai Airways Internationa	-82%	-82%	-77%	-51%	-50%	-50%	-51%	-51%	-51%	-51%
beria	-17%	-18%	-18%	-13%	-15%	-17%	-18%	-14%	-17%	-17%
peria Spirit Airlines	22%	25%	29%	28%	-6%	-1/70	*1070	-1470	÷17.70	-1770
Air India Limited	-28%		-28%	-35%	100 A C C C C C C C C C C C C C C C C C C	370/	2400	-36%	-37%	-41%
VA Air	-28% -52%	-28% -52%	-28% 4%	-35%	-36%	-37% -2%	-34%			
ichuan Airlines	25%	17%	4% 27%	16%	1% 20%	15%	12% 9%	-6% 9%	-5% 13%	-6%
										13%
thiopian Airlines Group	-15%	-14%	-13%	-3%	-3%	-7%	-9%	-8%	-8%	-7%
iamen Airlines	22%	11%	296	-99%	-99%	-99%	-100%	-100%	-100%	-100%
Asiana Airlines			-37%	-5%	-7%	-8%	-8%	-9%	-10%	-9%
Wizz Air	47%	48%	46% Dijo Seabury (16%	16%	9%	8%	4%	4%	11%

Intra-Asia was the only region without month on month recovery



Asia Pacific has been the slowest area to recover, while North and Latin America were stronger

Growth in passenger volumes, by region



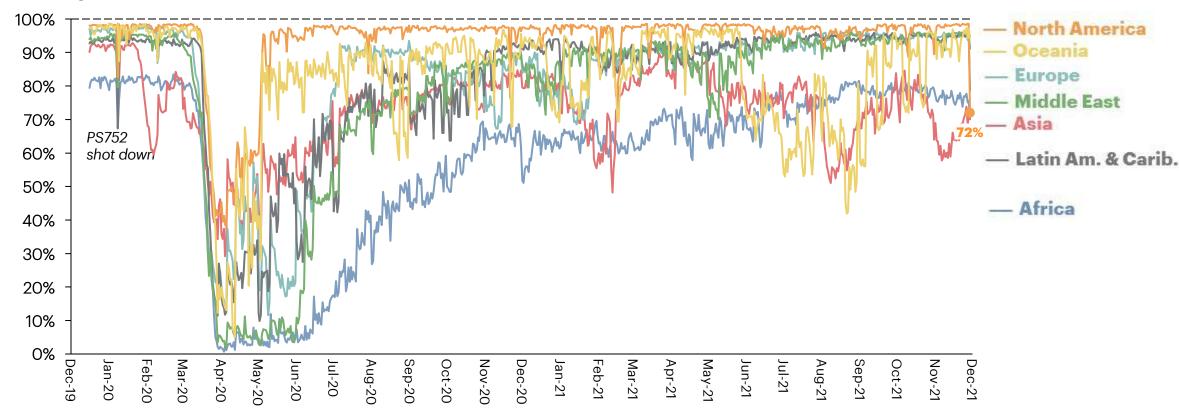


Omicron variant led to drop of c. 30 ppts in schedule reliability in North America

In-flight ADS-B signals received

Narrowbody and widebody fleets

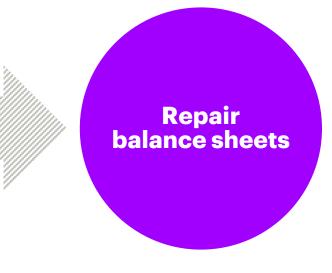
% of schedule flights for which a signal was received



Adjusting the flight path

Storms on flight path

- !! Border closures
- !! Lower demand with less business mix
- !! Increasing fuel prices and taxes
- !! Sustainable fuel availability



Course corrections

- ✓ Reduce flying & furlough
- ✓ Ask for help
- ✓ Grow Cargo LF and charge more
- ✓ Control capacity deployment
- ✓ Cut costs
- Cut more costs & raise prices
- Sell more services

After losing \$137B in 2020 (after 80B+ of non-reimbursable support), how are airlines performing in 2021?

Q3 2021 Profits

Ryanair Alaska

Nearing Profitability

Wizz Air Southwest jetBlue

Required a Reboot

Alitalia
Avianca
Aeromexico
Malaysian
LATAM
Norwegian
Philippines
South African Airways
Thai
Virgin Atlantic
Virgin Australia
...and others

Still Face Significant Challenges

Every other carrier

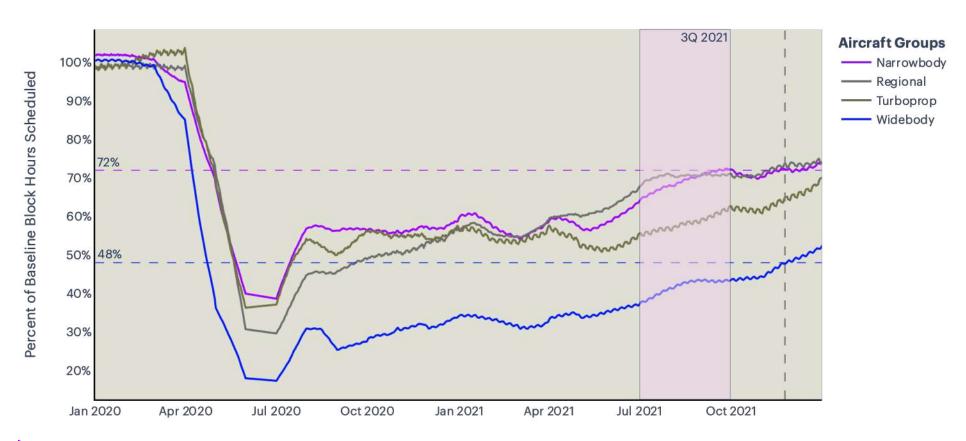


How much further improvement is required to bring the airline industry to break even?

USD impact on profitability	Current Capacity (50% for 2021)	80% Capacity Recovery	100% Capacity Recovery	
Overall demand drop, net of capacity reductions				
Revenue impact of new business travel mix				
Air Cargo tailwind	75B			
Impact of 1-time grants and government furlough support				
Sustainable cost reduction efforts				
Expected Industry Op. Profit	-55B			
Incremental COVID debt service				
Impact of carbon taxes				
Inflationary increases in airports, ATC, & OEM agreements				
Further improvement needed				
Target Industry Operating Profit to service debt	\$40B			

Global block hour recovery is heavily weighted towards narrowbody aircraft

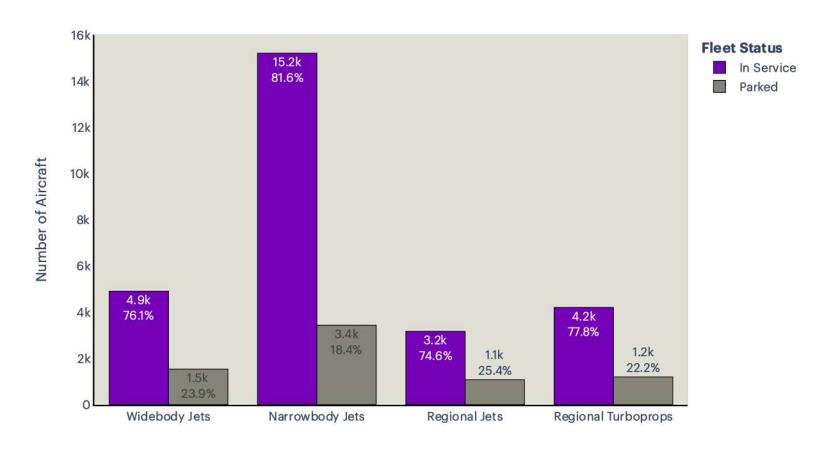
Global Schedule Recovery as of November 24





3/4 of each category in the global fleet is in service

Global Fleet Status as of November 24



- The parked aircraft are on average 4 to 6 years older than in service aircraft
- Parked widebodies are approximately 15 years old
- Parked narrowbodies are approximately 17 years old
- Available supply and demand will remain out of balance for a long while as significant numbers of aircraft are "standing by"

How much further improvement is required to bring the airline industry to break even?

USD impact on profitability	Current Capacity (50% for 2021)	80% Capacity Recovery	100% Capacity Recovery	
Overall demand drop, net of capacity reductions	-\$135B	-\$30В	ОВ	
Revenue impact of new business travel mix	-55B	-65B	-85B	
Air Cargo tailwind	75B	65B	45B	
Impact of 1-time grants and government furlough support	50B			
Sustainable cost reduction efforts	20B	30B	40B	
Expected Industry Op. Profit	-55B	-20B	ОВ	
Incremental COVID debt service	+10B	+10B	+10B	
Impact of carbon taxes	TBD	TBD	TBD	
Inflationary increases in airports, ATC, & OEM agreements	TBD	TBD	TBD	
Further improvement needed	85B+	70B+	50B+	
Target Industry Operating Profit to service debt	\$40B	\$40B	\$40B	

Limited ability to drive significant yield improvements until demand fully back

Business traffic mix is down 50% from pre-COVID levels

More widebody capacity will bring supply and demand more in balance

Fuel efficient aircraft, impact of operational efficiency improvements, durable contract renegotiations

\$200B incremental debt, 2% interest, 25 years

~20-30% further efficiency improvements

Similar to pre-COVID industry profits, limited ability to fund transition to net zero

The addressable value chain does not have \$50B - \$70B in further efficiency improvements

Immediately obvious material efficiency opportunities

- (<\$15B) Air space and navigation improvements
 - Has proven politically difficult
 - Long lead times
 - Significant capital investments
- (<\$5B) Airline support services organisations
 - Significant scope for BPO opportunities
 - Full scale industry value

Longer term efficiency opportunities

- (<\$15B) Further digitization and automation of airport and customer service processes
 - Underway, hugely complicated involving multiple partners
 - Cloud dependent
 - Airport infrastructure dependent
- (<\$2B) Electrification of airport and cargo ground equipment
 - Significant capital investment required from value chain
 - Long payback periods



Every Existing Airline Now Wishes They Were More in The Cloud

CEOs wish...



... they had the business capabilities to better **differentiate in a disrupted world**



... they had stronger and more integrated **e-commerce** systems



... they were more digital and data driven



... they had modernized their IT



... they were better at virtual collaborative working



... they had a more **agile operating model** enabling **cross functional / cross BU working**



... they had a more variable cost structure



... they used more automation and Al

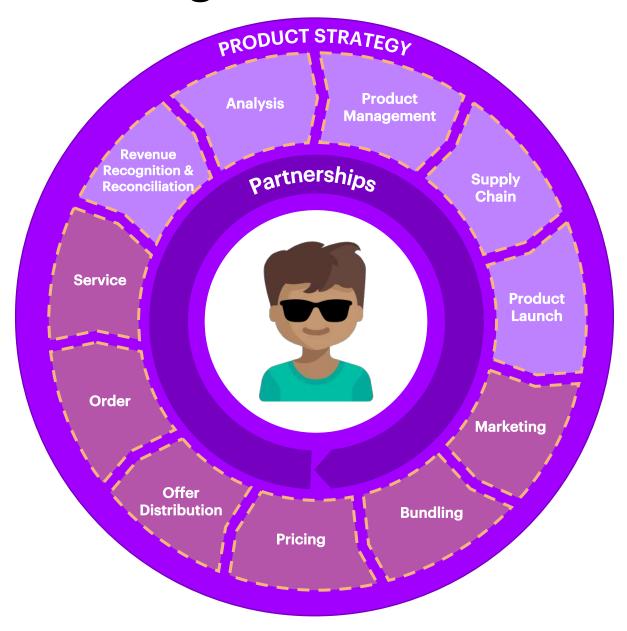


... they were more connected to **travelers** and **guests**



... they had richer industry **ecosystem** collaboration

Airlines are reinventing around customers and orders

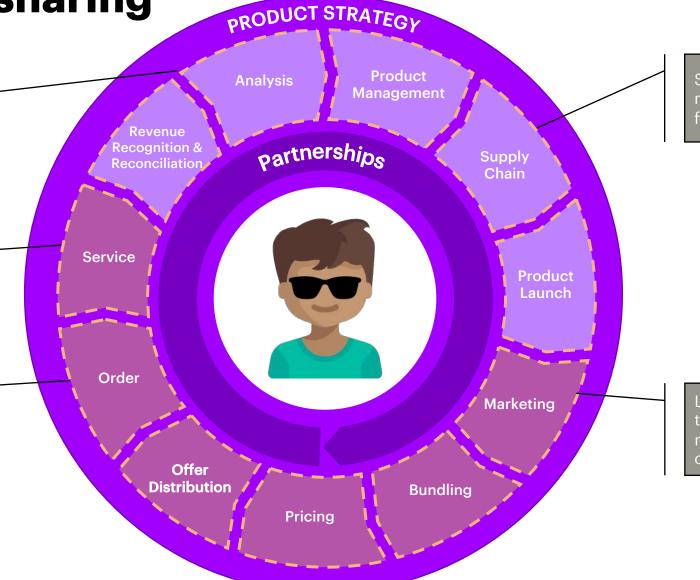


Value chain partners need to digitally re-invent with win/win risk sharing

Collaborate with data to improve services

Adopt aligned incentives, new procedures, and technology to commercially extend airline to gate & baggage management processes. Develop & deliver more "productized" services.

Integrate special handling touch & recognition services into airline order management process



Support extended "in-themoment" retail extensions for airlines & airports

Link incremental services & touch points with airline marketing messaging & communication