

# A Study of the Operational Resilience of an Indian Airline Company

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## Abstract

Starting January 2020 for the period of two years, many Indian industries were adversely affected because of the pandemic. The severity of the impact had varied from industry to industry. The study attempts to understand the severity of the damage it has caused to the airline industry with the purpose to comprehend how the industry was coping up with the heavy losses it suffered, due to the impact of lockdowns imposed by the government authorities to arrest the pandemic. The industry by its very nature has a very high fixed cost and administrative cost, which leads to monumental losses if people stop using it even for a brief period. The study encompasses the information and data available for various airlines, news articles, publication in related journals and inferential studies. Through this paper, an attempt is made to figure out as to how we can bring around the industry to its previous pre-pandemic level.

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## Research Methodology:

The Research is based on secondary data gathered from various airlines news, published articles and related sources

The Research has essentially used qualitative data and mixed data

The Research employs deductive reasoning and logical interpretations

## Overview of the Difficult Situation:

Mazareanu (2021) states: COVID-19 impact on passenger aviation: The corona virus as a health shock impacted almost every dimension of the economy and society. Its implications on the global aviation industry discovered to be far reaching, as most of the airlines can't continue their operations due to lockdowns and other border control measures taken by the governments. As of April 2021, the projected impact of COVID-19 on the aviation industry was at three hundred & seventy billion U.S. dollars in revenue loss. As the COVID-19 crisis continued, the decade long

growth of passenger aviation could be disrupted throughout 2021. In 2020, air passenger traffic globally dropped by at least 2.8 billion passengers. In 2021, due to the coronavirus pandemic, the estimated number of scheduled passengers boarded by the global airline industry amounted to just over 2.2 billion people. This represented a 50 percent loss in global air passenger traffic compared to 2019.

Suk & Kim (2021) states: Large air operators altered decision taking in connection to the rapid dissemination of the infections in direct relation to the decline level in the air operators' business. While the influence was less during the initial phase, large air operators continued their state of affairs. Soon, the size of the devastation grew big, that forced air operators put into action capability adaptations and appeal for rules of relaxation from government. As business weakening became intense, air operators kept on demanding for government help and altered their attention to the consignment transport of big-requirement goods and medicine provisions. Finally, business hardship and anxiety forced them delay hostile buyout in favourable circumstances. Business Today (2021) India's air operators and airfields suffered a predicted damage of nineteen thousand five hundred sixty four crore rupees and fifty one hundred sixteen crore rupees, correspondingly, in 2020-21 because of serious turmoil caused by the corona virus pandemic. Hon'ble Minister of State for Civil Aviation General (Dr.) Vijay Kumar Singh (Retd.) reported this in his penned response to a query in the Council of States on Monday.

He added that the planned local air trips were postponed in the country beginning at 25<sup>th</sup> March 2020 until 24<sup>th</sup> May 2020, because of the disruption of worldwide spread of corona virus infections. "The aviation sector in India has been affected due to severe disruption caused by the COVID-19 pandemic," recorded Dr. Singh.

"The estimated losses incurred by airlines and airports in India in the financial year 2020-21 is approximately Rs19,564 crore and Rs 5,116 crore, respectively," MoS CA noted. Local flier movements reduced by 0.3% in 2019-20 and by 61.7% in 2021 because of COVID-19.

At the same time, MoS CA recorded that Air India and Spice Jet had overdue debt of two thousand three hundred fifty crore rupees and one hundred eighty five crore rupees correspondingly to the Airports Authority of India (AAI) at September of that year.

"Some airlines have defaulted on clearance of their dues," MoS CA stated.

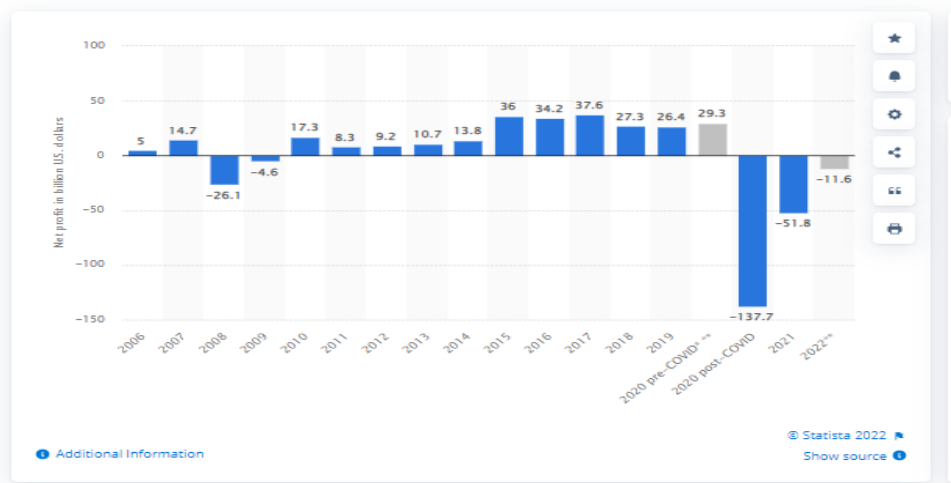
Dr. Singh recorded that costing punitive interest, exchanging the amounts deposited for safety with cash besides making use of legal recourse were additional actions possible for the administration to recover of payment.

MoS CA also recorded that the overdue charges to be paid by Air India, Alliance Air, Spice Jet and Go Air (presently named as Go First) until September 2021 was two thousand three hundred fifty crore rupees, one hundred nine crore rupees, one hundred eighty five crore rupees and fifty six crore rupees, correspondingly.

Transportation &amp; Logistics &gt; Aviation

**Net profit of commercial airlines worldwide from 2006 to 2022**

(in billion U.S. dollars)

(Ref.: [www.statista.com](http://www.statista.com))**Significance of India Specific Study:**

As per the IBEF (2021) states report, the civil aviation industry in India was emerging as one of the fastest growing industries in the country in the last three years. India became the third largest domestic aviation market in the world and is expected to overtake UK to become the third largest air passenger market by 2024.

As per Baldanza (2021), India is the biggest democracy on the earth and a place for living for more than 100 crore people. Similar to numerous developing economies, the people of India are moving largely within India and to outside India locations. The air operators of the country have advanced quite well in the latest decade. Companies such as Jet Airways as well as Kingfisher have disappeared, at the same time Indigo airlines has developed to be the country's biggest air operator with more than fifty percent contribution of the air trips customers. The person acting on the board of directors for Go First, the freshly renamed with brand of GoAir, an air operator providing service to the "other 50%" not served by Indigo states that it provides him an original view as to the way the air operation business in the country is organized currently and the it is altering.

Further the country was a highly infected area for pandemic on the earth. Similar to most of the countries other than USA, development of antitoxins was time consuming and exchange of information with public was a question. This led to the country's administration limiting air travel volume and controlling tariff at circumstances, as well as also generated an extremely large decline in passengers from India ready to and capable to take up journey. The administration of India did not allow the salary help that the USA did for its air operators, deserting every operator to administer the circumstances belonging to it opposite very quickly deteriorating movements and altering administration orders. At the same time the country's air carriers were altering indeed prior the COVID, the present circumstances were possibly to speed up flows that would reform the country's air operation perspective.

Suk & Kim (2021) states: Various investigators have researched the influences of the pandemic on the air operators. Nevertheless, there continues a scarcity of knowledge on the difficult business operations and managing critical situation of the aviation sector. Due to lack of adequate plan of

action to reply to the dread of pandemic, an all-inclusive awareness of one of the large Indian air operators' plan of action to reply from elasticity related to operations against worldwide spread of corona infections was provided. Additionally, their research produced favourable circumstances for on-field managing to reconsider the way large Indian airline reacted to the critical situation and discovered administrative awareness to recover its corporate sustainability.

### **Significance of the Specific Airline:**

As per Baldanza (2021), The Current Participants: Currently Indigo is certainly the biggest air operator in the country along a dominating more than fifty percent of the market contribution. This count is further a restraint for the carrier, but, because growth to sixty or seventy percent is unrealistic. The airline's development will be a function of India's development that is considerable on its own. The remaining part of the country's market contains Air India, Spicejet, Vistara, and Go First. These air operators move on a various settings of business configurations, along Air India existing the greatest heritage of the association and retaining nearly all the worldwide service of long distance transport. Vistara is an expensive air operator. It is business-oriented carrier, and that introduces doubt about their workability on a planet where this movements were unpredictable to come back completely. Spicejet made their business configuration complex at the time of closure of Jet Airways, engaging aircrafts with business category boxes. Spicejet thereafter, suddenly, turned into an air carrier in business category. Go First has announced a plan of action to develop into the country's first real extreme-low fare operator, modelling itself following air carriers such as Ryan Air DAC from Ireland as well Spirit Airline Inc. from the USA. AirAsia India was declining before COVID and its engagement with India was away from sure. As COVID has stressed every air operator, this introduces doubt on the ongoing issue of sale of Air India by the administration and other operators' ability to survive in this association.

### **Business Recovery & Challenges during Recovery:**

Vanamali (2021) reports: If the current signs are to be followed, Indian aviation field is showing a firm recovery after COVID-related turmoil. On ninth of October, local airlines carried beyond three lakhs travellers for the 1<sup>st</sup> occasion after February. Although it is less than the position prior to pandemic i.e. three lacs fifty thousand passengers every day, situation is surely improving for the field.

The bigger airports have seen big mobs and lengthy lines of passengers latest end of the week, signifying the recovery of journey by air. India's first & second largest airports, New Delhi along with Mumbai, are reviving terminuses those were closed previously because of small number of flyers.

During the current highest demand vacation period, the authorities have permitted air carriers to run at their full volume from eighteenth October. Currently, this restriction is eighty five percent.

Information arising out of the governing body for air conveyance, Directorate General of Civil Aviation, display that the mean load determinant of bigger air carriers was seventy percent in August. India's largest air carrier, IndiGo, stated its present load determinant was at seventy five to eighty percent. IndiGo is running twelve hundred trips every day. This is approximately eighty per cent of its capacity prior to pandemic.

The country is releasing its borders for tourists after eighteen months. The administration will begin granting new traveller visas starting with Fifteenth October to immigrants arriving by chartered air travel. The fliers who wish to visit the country on normal commercial air travel can do the same starting with fifteenth November. Regulations connected to their tests, isolation and immunization are to be planned as yet.

To assist the travel business, the administration is taking various initiatives like giving out visas to the first fifty thousand travellers without any cost. The plan will be valid until March following year. The country had witnessed almost eleven million global passengers' arrivals during 2019. That has resulted into forex of three thousand crores dollars.

Accompanying the purchase of Air India by the Tata group settling along the close of this year in addition to Jet Airways is resuming operations shortly later, the New Year assurances to be adequate fresh openings for the country's air travel.

Akasa Air is the recent air carrier company supported by Indian billionaire business magnate, Rakesh Jhunjhunwala. It received a NOC from the administration on eleventh October. It believes to begin operating in the following year.

Akasa Air yet to get a consent from the Directorate General of Civil Aviation (DGCA), as well as additional approvals. Rakesh has collaborated with IndiGo's former President Aditya Ghosh and Jet Airways' Chief Executive Officer Vinay Dube to initiate the economical airline.

Because the need for aviation moving slowly close to the position prior to COVID, the time may be in favour of Akasa Air to begin its working with the expected framework.

Vanamali (2021) has stated: At the same time, an important issue that possibly operates in opposition the sector is the excessive cost of aircraft turbine fuel. It is currently considered as forty percent of the expenditure of operating an air carrier company in the country.

In Chennai, the traders controlled by government have escalated Aviation Fuel costs by nine percent in the previous month and eighty three percent in the previous year to around rupees seventy four thousand five hundred per kilo litre. The escalation comes amidst an increase in worldwide crude oil prices indicating an increasing requirement.

Additionally, the administration's denial to abolish tariff limit will burden the recovery of airline business. The tariff limit existed from previous year's May. The lower limits to tariff were dictated by the administration to take care of air carriers not strong fiscally at the time of COVID, at the same time uppermost caps assured that travellers were not charged to excess. As the need is restored presently, air operators are requesting for constraints on tariffs to be withdrawn. As an insignificant relaxation, previous month the administration allowed air operators to fix their own tariff for flights more than fortnight from the day of reservation, in place of the previously thirty. This is supposed to enhance contest among the air operators all along the vacation period.

Assuming that the ongoing flow continues with a expected pandemic situation, the country's civil air carrier industry may be on the edge of an improvement.

### **Resilience Strategy Implemented:**

Joshi (2022) stated: The airline with the best on time performance in February out of four metro cities (Delhi, Bengaluru, Hyderabad, and Mumbai) was IndiGo. This isn't much of a surprise as the low-cost carrier (LCC) is often praised for its operational efficiency and performance. IndiGo had an on-time performance of 95.4 % last month.

The budget carrier continues to rule the domestic market in the country with a share of 51.3 % without compromising on the punctuality of its departures.

An Indigo spokesperson commented on the airline's performance for the Economic Times, saying, "We are delighted to OTP consistently despite the most challenging situations. We have been able to improve our OTP to 95.4 per cent in February 2022 from an annual monthly average of 93.5 per cent in 2021."

Indigo along with GoFirst sits at the top when it comes to having the least number of cancellations, with GoFirst beating IndiGo on this parameter.

IndiGo commands an remarkable position not just in India but globally as well. The airline was voted the 4th most punctual airline globally in 2018, 6th most punctual in 2019, and 3rd most punctual globally in 2021 by the OAG Punctuality League.

Aviation expert Ameya Joshi for Moneycontrol analysed the Directorate General of Civil Aviation data for the month of December 2021 and found that IndiGo was the most truthful in sticking with its announced schedule. The carrier operated an average of 10,137 flights a week out of the 10,243 departures it had approved for the winter schedule – a compliance rate of 99.99 %.

Airbus (2022) IndiGo has become the latest operator in India to adopt Skywise Health Monitoring (SHM) as its future fleet performance tool. The long-standing Airbus customer will be the 55th airline using this innovative tool to optimise the maintenance of its fleet.

Launched in 2019, Skywise Health Monitoring system gathers live diagnostic feeds from the aircraft through its Aircraft Communication Addressing and Reporting System.\* link to the airline's information system.

IndiGo is going to use the solution for its A320 Family fleet. Airbus' Structural Health Monitoring will support the airline's maintenance and engineering teams by enabling real-time management of aircraft events and troubleshooting. This will benefit the airline in classifying, prioritising, analysing, and handling in-service events, enabling quicker decision-making and minimising Aircraft on Ground risks.

IndiGo will be the largest Indian carrier to use SHM Structural Health Monitoring , and the second one to have selected this value-added Skywise solution in the region. The deployment will start by the end of March.

"IndiGo continues to remain in the forefront of technological solutions to further improve our operational efficiency. We keenly look forward to using the Airbus Skywise Health monitoring system and MATe to our advantage. IndiGo has been a leader in maintaining the best On-time performance and remains focused to excel our position as the market leader," said S.C. Gupta, Senior Vice President – Engineering, IndiGo.

Used by airlines around the world, Skywise Health Monitoring improves the overall fleet availability by managing aircraft events and their associated troubleshooting in real-time, allowing prioritisation and tracking to increase the dispatch reliability.

IndiGo has also purchased additional licences to use Airbus' mobile training suite "MATe", bringing their total number at IndiGo to more than 3,300.

Started in July 2021, MATe Suite (Mobile Airbus Training experience) is a mobile training solution for pilots featuring a virtual cockpit environment and offering interactive lessons. A modular solution, it covers the pilot ground training curriculum for both initial type rating and recurrent. Its

flexibility is greatly appreciated by pilots worldwide. MATE Suite also monitors trainees' progress, and they can download certificates of completion.

Mint (2022) reports the country's largest air operator, IndiGo, selected NAVBLUE to improve few of its most recent A320 airplanes to the extremely leading technology for navigation, RNP AR: Required Navigation Performance with Authorization required.

Along Airbus SE's RNP AR improvement, IndiGo aviators can take along a path hilly fields or various difficult airspaces along accuracy as well consistency.

To back its RNP as well RNAV working, IndiGo selected NAVBLUE's RAIM service for predicting, N-RAIM. NAVBLUE is the global leader in providing RAIM forecasts to the air traveller passengers, providing more than eighty five thousand forecasts daily. RNP AR arrivals or take-offs are in application for difficult airfields, with-path forecasts application the actual minimum acceptable satellite elevation above the horizon to avoid blockage of line-of-sight to clarify landscape examining.

CEO Fabrice Hamel of NAVBLUE, said: "We are proud that IndiGo, the largest airline in India and an established NAVBLUE customer since 2006, has renewed their trust in our products by choosing to upgrade its fleet with RNP AR capability, our complete end-to-end solution to support Ops approval, and N-RAIM, NAVBLUE's prediction service to support these operations. We are sure that our long track record supporting airlines with these solutions will be beneficial for IndiGo".

CEO Ronojoy Dutta of IndiGo, said: "We are pleased to partner with NAVBLUE to upgrade our latest A320 aircraft with the most advanced navigation technology. We have full confidence in NAVBLUE's expertise which will help our pilots traverse safely through challenging lands like curvy or hilly areas during the takeoff or landing. We believe this will enhance operational safety of the aircraft while also improving efficiency in the long run."

As per Kundu (2021) biggest Indian local air operator InterGlobe Aviation Limited-run IndiGo, that currently stated losses by quarters five times in sequence because of the continuing COVID, counted on taking numerous new actions for cost reduction.

These actions involved reducing fuel expenditures by introducing better energy economy airplane, withdrawing old airplanes, and re-bargaining airplane possession expenditures with granter of lease. The air operator had from the start of COVID previous year dismissed around fifteen per cent of its employees, enforced reduction in pay and unpaid vacation for employees, and bargained again current agreements with contractors.

Accordingly, the air operator's complete annual costs reduced by forty two percent all along the FY 2021 in comparison with the last financial. But, the airline endured to experience a monetary loss of ₹ 0.19 billion daily all along the currently ended March quarter, elevated from ₹ 0.15 billion daily all along the preceding quarter.

The air operator's problems in terms of capital used for daily operations were anticipated to go up all along the June quarter, Motilal Oswal Institutional Equities stated in a current noting.

"Cash burn is expected to be higher in the first quarter of 2022 as daily passenger demand descends to about 80,000 passengers from the highs of about 300,000 at the end of Feb'21," it added.

All along the arriving months, the air operator would withdraw additional A320ceo aircrafts and replace them with more fuel-efficient A320neo planes, apart from inducting A321neo planes.

The airline has replaced 25 A320ceo with additional energy economy A320neo aircraft to date and planned to introduce not less than twenty-twenty five A321 aircraft all along FY 2022, as stated by company representative.

"Fuel is obviously our biggest line item and just reducing fuel consumption is a big deal for us," IndiGo's chief financial officer Jiten Chopra told analysts in a post result call.

"So there are two substitutes. One is the classic going to the neo. And then from the A320 to A321. Accordingly from the classic to neo the numbers are clear to everyone. It is 15% lower in costs and fuel. So it's a good deal," Chopra added.

The airline may however not look to further reduce the employee cost after implementing salary cuts and leave without pay. However, it will explore opportunities to renegotiate lease contracts for aircraft with lessors.

"Then we are looking at every other opportunity including of course aircraft ownership costs. (We are) talking to the lessors on seeing what sort of deals we can get," the airline's chief executive Rono Dutta said.

"And then all the other non-discretionary costs, everything that we have. We are cutting back on, but I would hold our breath in terms of having major, major operations to reduce our unit costs further. And what we need to do is get the airline going and get more on the revenue sidespeaking," Dutta continued.

The company's net debt increased by thirty-one percent to ₹299 billion at the end of 31 March 2021 in comparison to the year-back duration. The air operator's money surplus dropped nine percent to ₹186 billion all along the identical duration.

All along the identical duration, the air operator's collective net losses expanded to One thousand one hundred and forty seven crore, from eight hundred and seventy one crore losses stated all along the year ending on 31 March 2020.

"Fuel as you know is the biggest cost and our cost per flying is down 10%. So that's a big deal. And it will continue to get better as we take more and more yields," Dutta stated, making further comment that A321 airplane would aid the air operator decrease energy expenses and permit the air operator to aim not only fresh local places to go but also fresh global paths that enhance its revenues.

"So our performances are in the right direction. There is only one negative, that there are not enough customer load factors. Now the positives that I talked about are structural, and things will probably get better over time," Dutta made further comment.

Mishra (2021) IndiGo declared that it chose CFM International LEAP-1A engines to energize its group of airplanes 310 new Airbus A320neo, A321neo, and A321XLR. This contract involves six hundred twenty fresh built in engines and connected reserve engines and a lengthy-period, several years' service contract as stated by the company.

This agreement came after the company choosing LEAP-1A engines and endorsing a lengthy-period service contract for engines to energize 280 A320neo class of airplanes in 2019. This fresh contract, so, ensures the LEAP-1A engine and its lengthy-duration service contracts for an amount of five hundred ninety IndiGo A320neo class of airplanes.

The air operator, which previously had taken with Pratt & Whitney engines for its Airbus 320 (neos), was recently going for CFM engines after P&W's Gear Turbofan (GTF) engine showed difficulties influencing the air operator's efficiency related to operation.



The air operator stated that it was presently running 7A320neo and fifteen A321neo with LEAP-1A engines. "This agreement will secure LEAP-1A engines and service agreements for its A320neo family aircraft to be delivered from 2023 onwards," the airline stated.

"This is a pivotal milestone that reflects our long-standing commitment to rapidly strengthen our network both domestically and internationally. This expansion will serve as a catalyst to boost India's economic growth and the mobility of its people. India's aviation sector is poised to grow from strength to strength, and we will continue on our mission of building a world class transportation network. We are here to deliver on our promise of providing low fares and a courteous, hassle free experience to all our customers," Ronojoy Dutta, Chief Executive Officer of IndiGo was quoted in the release.

### **Outcome of the Resilience Strategy:**

Joshi (2022) has stated: IndiGo, major Indian air operator by magnitude group of airplanes and portion of local business, associated with international rivals in economic return after the second quarter of FY22.

The air operator stated a gain of 1.3 billion rupees on 93 billion rupees of income from working. This supported reduction in 3/4<sup>th</sup> year deficit to 45 billion rupees. This was the air operator's initial gain following 21 months of deficits and signifies a quite-rightful return from the deficit of 14 billion rupees prior to third quarter of FY22. During the dark periods, a money making quarter presented hope and was an indication of the periods to arrive at the same time the planet recovered to order.

Besides the outcomes arrived the declaration of co-promoter Rahul Bhatia being assigned responsibility of the MD of the Indigo, a previously unoccupied role.

The outcomes were supported by a combo of determinants like greater usage, the beginning of travel for pleasure within India and abroad, commuters touring for festivals and vacations, and a supportive alteration in state guidelines.

**Abolishing limits:** The administration that had wrapped up volume after the resumption of flights determined to reverse the limit, permitting air operators to run their full authorised plan for cold season of the year. The alteration became effective on October 18, 2021 that implied air operators were unrestrained to increase trips established on requirement. Accordingly, few airfields witnessed greater movement compared to pre-pandemic periods.

Furthermore, governments decreased or abolished limits as immunizations accelerated. The expense for journey was decreased as dual-immunized commuters were relieved from displaying no infection examination outcomes on landing.

The price-limit period was decreased to 15 days on a rotating base. Permitting air operator to charge at wish on the 16th day on a rotating base implied that they could return to encouraging need by fares. Nevertheless, requirement was extremely strong in November and December. Due to this demand air operators taken best advantage of relaxation – enhancing tariffs on nearly all passages and trips further the 15-day frame of price limits.

**Enhanced usage, greater income and energy economical group of airplanes:** For an investment-demanding industry to flourish, the attention has forever been usage. The greater a resource is used, the more is the expenditure allocation. During many years, air operators have concentrated on usage

thrust further the 12-hour target. This supports allocation of expenditures and decrease the cost per available seat kilometre (CASK) and helps ability to earn profits.

The air operator enhanced its usage to 10.7 hours after the second quarter as the administration permitted the complete ability to serve to be used. This yet was less compared to pre-pandemic periods after global services were limited under the air bubble arrangement.

The air operator used 45.2% extra ability to serve after second quarter that supported distribution of its fixed expenditures and driven to the air operator coming back to a surplus. Air operator management stated on the analyst call that the company wanted to arrive at 13-hour usage early and that it would be based on global working being authorised. The air operator began performing trips below the air bubble to the UAE, Qatar, Kingdom of Saudi Arabia and State of Kuwait.

The air operator stated local income went beyond pre-COVID standards and global operations performance was improved. Two together income flows would be a contest to keep up as the planet sets free. From the global point of view, there would be greater contest that would impose burden on earnings, and at the same time the price limits declined to disappear, some air operators could adopt a fare-fight that the company would be compelled to enter.

The air operator exchanged 16 A320ceo airplanes in the quarter, three in addition in the earlier quarter, and its A320ceo group of airplanes was currently nearly 50% of December 2020 level. Energy expenditures were 34.97% of complete expenditure and quite greater than in the preceding quarter. Still the change to the energy-economical “neo” airplane class is aiding conserve up to 15% of energy expenses.

### Results & Conclusions:

- 1) The airlines must focus on improving their punctuality or on time performance. This will ensure more effective utilization of the aircrafts and staff, thereby improving productivity and profit margins
- 2) With the easing of all government restrictions, the aircraft occupancy factor or seating capacity utilization factor can be improved, thereby improving the passenger load factor
- 3) The pent-up demand of passengers, those who had held up their travel plans due to the restrictions over the past two years will lead to a growth in travellers. This will be particularly felt in areas like tourism and non-essential travellers.

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