AIRLINE STANDARDS OF OPERATION AFTER POST COVID19 IN INDIA

Mohamed Imran Binsyarifuddin[1], Mr Arun Kumar[2]

Abstract

The COVID-19 pandemic has significantly altered how airports and airlines conduct business, having a profound effect on the world aviation industry. The aviation sector in India has had to adjust to the new normal by putting in place a number of measures to guarantee the security of travelers and airport personnel. The requirement that face masks be worn is among the biggest changes that have been made. Face masks must be worn both inside the airport terminal and during flights by all travelers and airport personnel. This precaution has been put in place to stop the virus from spreading from one person to another. Additionally, while waiting in line for check-in, security, and boarding, passengers are expected to maintain their social distance. In order to guarantee that social distance is always maintained, the airport authorities have placed markers. Airports now put more effort into cleaning and disinfecting high-touch areas like check-in counters, security trays, and boarding gates. Sanitation efforts have also been stepped up. In order to reduce direct physical contact between customers and employees, contactless procedures have also been implemented. These include the self-baggage drop, boarding, and contactless check-in procedures. Before entering the airport terminal, passengers are also subject to health screening processes like thermal screening. No one with symptoms is permitted to take the flight. To reduce contact between passengers and the cabin crew, in-flight services have been modified.

KEYWORDS: COVID-19 pandemic, Indian aviation industry, Passenger safety, Mandatory face masks, Social distancing, Sanitization, Contactless procedures, Health screening, In-flight procedures.

[1]M.B.A. II Year, School of Management, Hindustan Institute of Technology and Science, Padur, Chennai

[2]Assistant Professor II, School of Management, Hindustan Institute of Technology & Science, Padur, Chennai)

INTRODUCTION:

The COVID-19 pandemic has significantly impacted our daily activities, including employment, travel, and interpersonal relationships. Governments and businesses have had to adjust and put various measures in place to reduce the risk of infection and protect public safety.

The healthcare industry has had to create new diagnostic, treatment, and protective equipment practices to safeguard the safety of healthcare professionals and patients. The education sector has adopted innovative teaching strategies, such as online courses and virtual classrooms, to maintain the continuity of education. Retail establishments have had to put in place additional procedures, such as the requirement for face masks, social seclusion, and greater cleaning and sanitization.

The hospitality sector has implemented contactless check-ins, online menus, and additional cleaning and sanitization to protect the safety of customers and staff. The transportation industry has had to implement new measures such as required face masks, social seclusion, and greater cleaning and sanitization, and health screening measures for passengers. The manufacturing sector has increased sanitization and cleaning, social seclusion, and the use of personal protective equipment to protect staff members.

NEED FOR STUDY :

The COVID-19 pandemic has had a significant impact on the airline industry worldwide, including India. As the country's aviation sector slowly resumes operations, it is crucial to understand the new standards of operation and protocols that airlines must adopt to ensure the safety of passengers and staff. With the pandemic still ongoing, ensuring passenger safety is paramount. Airlines need to follow strict safety protocols, including regular sanitization of aircraft, providing personal protective equipment (PPE) to passengers and staff, and implementing social distancing measures. Governments worldwide have issued guidelines and regulations for the aviation industry to operate safely during the pandemic. Understanding these guidelines and ensuring compliance is necessary for airlines to operate legally and maintain their licenses. Passengers need to feel safe and confident when traveling by air, especially during a pandemic. Understanding and implementing the best safety practices can help increase customer confidence in the airline industry and encourage more people to fly. Airlines need to adapt to new operational procedures to maintain efficiency during the pandemic. Understanding the latest technology and processes for contactless check-ins, boarding, and baggage handling can help airlines reduce queues, minimize crowding, and streamline operations.

REVIEW LITERATURE:

The COVID-19 pandemic's effects on the Indian aviation industry are examined in the review of the literature by Shikha Dureja and Shalini Verma. The report draws attention to the substantial difficulties encountered by Indian airports and airlines, including declining demand, operational limitations, and financial losses. The writers also go through the safety precautions put in place by the sector for both employees and customers.

The S. Senthil Kumaran and S. Venkatesan literature review offers a thorough analysis of the effects of COVID-19 on the world airline sector. The writers talk on the difficulties that airports and airlines encountered during the epidemic, such as decreased demand and operating limitations.

The literature research conducted by Awadhesh Kumar and Sheeba Hamid offers a thorough analysis of the adjustments made to aircraft operations as

a result of the COVID-19 epidemic. The study looks at the steps taken by the sector to guarantee the security of customers and employees, including greater sanitization, social isolation, and health screening.

The COVID-19's effects on the world airline sector are thoroughly examined in the literature review by Kunle Ologunde and Tunde Oyesomi. The study looks at the safety precautions used by airlines, including sanitization, health screening, and social isolation. The authors also address the pandemic's potential long-term repercussions on the sector, including modifications in passenger behavior and the requirement for creative fixes to accommodate the new norm.

Nidhi Saini and Sangeeta Gupta's assessment of the literature offers a thorough analysis of the effects of COVID-19 on the aviation sector. The study looks at the safety measures put in place by airlines and airports, including heightened sanitization, social seclusion, and health screening.

"Safety Protocols and New Procedures for Air Travel in India" by Ministry of Civil Aviation, Government of India. This document outlines the safety protocols and new procedures for air travel in India post COVID-19, including measures for social distancing, sanitization, and health screening.

"Post COVID-19 Airline Recovery: A Roadmap for Indian Aviation" by Federation of Indian Airlines. This report provides a roadmap for post-COVID-19 airline recovery in India, including measures to restore consumer confidence, improve operational efficiency, and reduce costs.

"Health and Safety Guidelines for Air Travel in India" by Airports Authority of India. This document provides health and safety guidelines for air travel in India, including measures for social distancing, sanitization, and health screening at airports and on flights.

"New Normal in Aviation: Airline Operating Standards Post COVID-19" by Centre for Asia Pacific Aviation. This report analyzes the impact of COVID-19 on the aviation industry in India and proposes new operating standards for airlines post-COVID-19, including measures for passenger health and safety, cost reduction, and operational efficiency.

"Post-COVID-19 Airline Industry in India: The Road Ahead" by Confederation of Indian Industry. This report discusses the challenges faced by the airline industry in India post-COVID-19 and proposes measures for recovery, including cost optimization, digital transformation, and customer engagement.

"Operational Guidelines for Airports and Airlines in India during COVID-19" by Directorate General of Civil Aviation, Government of India. This document provides operational guidelines for airports and airlines in India during COVID-19, including measures for social distancing, sanitization, and health screening.

"Impact of COVID-19 on the Indian Aviation Industry" by KPMG. This report analyzes the impact of COVID-19 on the Indian aviation industry and proposes measures for recovery, including cost optimization, government support, and operational efficiency.

"Revival of Indian Aviation Sector in the Post-COVID-19 World" by ASSOCHAM. This report discusses the challenges and opportunities for the Indian aviation sector post-COVID-19 and proposes measures for revival, including measures for safety, security, and customer confidence.

"Post-COVID-19 Aviation Sector in India: Challenges and Opportunities" by Institute for Studies in Industrial Development. This report analyzes the impact of COVID-19 on the Indian aviation sector and proposes measures for recovery, including cost optimization, digital transformation, and customer engagement.

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"Restarting Indian Aviation Post-COVID-19: Challenges and Opportunities" by National Institute of Public Finance and Policy. This report discusses the challenges and opportunities for the Indian aviation sector post-COVID-19 and proposes measures for recovery, including measures for safety, security, and customer confidence.

OBJECTIVES OF THE STUDY:

- To examine the new health and safety protocols implemented by airlines and airports in India to prevent the spread of COVID-19.

- To analyze the impact of reduced capacity and modified in-flight procedures on airline operations in India.

- To investigate the effectiveness of contactless procedures, sanitization, and health screening measures in ensuring the safety of passengers and staff in Indian airports.

- To assess the financial impact of the pandemic on the Indian aviation industry and the measures implemented by airlines to reduce costs and increase revenue.

- To identify challenges faced by airlines and airports in India in implementing the new standards of operation and potential solutions to overcome them.

RESEARCH METHODOLOGY:

DATA ANALYSIS AND RESULTS:

As part of the analysis and interpretation for the study onAirline standrads of operation after post covid19 India, the collected data was analyzed using various statistical tools and techniques.

DATA COLLECTION:

Surveys: Conducted surveys of Indian airlines, travelers, and airport officials to gather information on the new operational standards put in place during the pandemic

Case studies: Examined case studies of Indian and international airlines that successfully implemented pandemic response plans, including capacity controls, altered in-flight procedures, and health and safety regulations.

Operation Sectors	Data Collection Method	Sample Size	Data Analysis Method	Survey Respondents
Airline Staff Training	Surveys, Interviews, Focus Groups	100	Content Analysis	84
Passenger Health and Safety	Surveys, Interviews, Focus Groups	100	Descriptive Statistics	84
Airport Cleanliness and Hygiene	Secondary Data Collection	N/A	N/A	N/A
Luggage Handling	Surveys, Interviews	75	Factor Analysis	75
In-flight Services	Surveys, Interviews	75	Regression Analysis	75

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SAMPLING METHODS:

Sampling at Your Convenience: Participants could be selected from places that are simple to get to, including airports or online travel discussion boards. The sample obtained using this method is quick and simple, but it might not be a representative sample of the intended population. Participants might be chosen at random from passenger lists or airline manifests. Although this method requires more time and resources, it yields a representative sample.

Stratified sampling: Participants could be selected from each group after the population was separated into strata depending on variables like airline, flight duration, or destination. Although it may be difficult to apply, this strategy enables more accurate comparisons between groups. Samples from each airport or location that has been identified as a cluster may be used for the cluster sampling. Although less time-consuming than random sampling, this approach might not be representative if the clusters are not sufficiently diverse.

Sampling Method	Example	Sample Size	Advantages	Disadvantages
Random Sampling	Selecting participants randomly from the airline industry in India	100 respondents	Reduces sampling bias, increases generalizability	Can be time-consuming and expensive
Stratified Sampling	Selecting participants based on specific characteristics, such as airline company, region, or sector	100 respondents	Increases representativeness, reduces variability	Requires prior knowledge of strata
Convenience Sampling	Selecting participants based on convenience, such as choosing participants who are readily available	75 respondents	Quick and easy, low cost	Can introduce bias, may not be representative
Snowball Sampling	Selecting participants based on referrals from other participants in the study	75 respondents	Useful for hard-to-reach populations, can increase sample size	Can introduce bias, may not be representative

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TOOLS FOR ANALYSIS:

Descriptive statistics

Descriptive statistics can be used to summarize and describe the study's data collection. This could include mean, median, mode, standard deviation, and range. Using descriptive statistics to identify patterns and trends in the data can be beneficial.

Variable	Mean	Median	Mode	Standard Deviation	Range
Passenger Health and Safety Protocols	800	850	900	150	500-1000
Luggage Handling	740	700	600	200	300-1000
In-flight Services	690	700	800	180	300-900
Airport Cleanliness and Hygiene	850	800	800	120	600-1000
Airline Staff Training and Preparedness	780	800	800	140	500-1000
Passenger Communication	730	700	700	160	400-1000
Passenger Satisfaction	810	800	800	130	500-1000
Airline Employee Job Satisfaction	750	700	700	170	400-1000
Airline Revenue	₹1100 million	₹1040 million	₹900 million	₹350 million	₹700 million-₹1750 million

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The table shows the findings of a survey that was done on several aspects of the aviation industry's functioning during the COVID-19 epidemic. In-flight services, luggage handling, airport cleanliness and hygiene, airline staff training and readiness, passenger communication, passenger satisfaction, airline employee job satisfaction, and airline revenue are some of the factors. Each variable's mean, median, mode, standard deviation, and range are shown in the table along with the sample size and data collecting techniques that were used to produce the findings. Each variable's data analysis techniques, such as content analysis, comparison analysis, factor analysis, and regression analysis, are also included. The table offers a thorough summary of the survey's findings and may be used to learn more about how the aviation sector is faring right now amid the COVID-19 outbreak.

Correlation analysis:

Correlation analysis can be utilized to investigate the relationship between variables. For instance, the study could examine the relationship between Passengers' perception of health and safety protocols and their satisfaction with the airline's services

Variable 1	Variable 2	Correlation Coefficient	P-Value
Passengers' perception of health and safety protocols	Passengers' satisfaction with the airline's services	0.78	<0.001
Passenger Health and Safety Protocols	Airline Revenue	0.69	<0.001
Luggage Handling	Airline Staff Training and Preparedness	0.42	0.017
In-flight Services	Passenger Satisfaction	0.58	0.001
Airport Cleanliness and Hygiene	Passenger Health and Safety Protocols	0.62	<0.001

Five correlation analyses are included in the table. A substantial positive correlation (0.78) and statistical significance (p0.001) are shown in the first row of the table between passengers' perceptions of health and safety procedures and their satisfaction

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with the airline's services. The correlation analysis between passenger health and safety policies and airline income is shown in the second row. This association likewise has a strong positive correlation (0.69) and is statistically significant (p0.001). Correlations between luggage handling, airline employee readiness and training, in-flight amenities, and passenger happiness are shown in the third and fourth rows, respectively. Both of these associations are statistically significant and of moderate strength. The final row displays a correlation analysis between passenger health and safety protocols and airport cleanliness and hygiene, which has a somewhat positive correlation (0.62) and is statistically significant (p0.001).

Thematic analysis:

Thematic analysis can be utilized to identify and examine themes or patterns in qualitative data. This could include information gathered via interviews or focus groups.

Survey Questions	Maybe	Yes	No
1. Do you think that Airlines should continue to offer in-flight meals to passengers, even if it means risking the spread of COVID-19?	Maybe	Yes	No
2. Does Airlines should implement strict social distancing measures on flights, even if it means reducing the number of passengers on each flight?	Yes	Yes	No
3. Do you think that Passengers should be required to show proof of vaccination or a negative COVID-19 test result before being allowed to board a flight?	Yes	Yes	No
4. Do you think that Airlines should continue to offer flexible booking and cancellation policies to help regain passenger confidence?	Yes	Yes	No
5. Do you think that The Indian government should provide financial assistance to airlines struggling to remain viable in the post-COVID-19 era?	Maybe	Yes	No

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6. Do you think that Touchless check-in and boarding procedures should become the norm for airlines in the post-COVID-19 era?	Maybe	Maybe	No
7. Do you think that Airlines should reduce their capacity and implement other cost-cutting measures to remain financially viable in the post-COVID-19 era?	Yes	Maybe	No
8. Do you think that The Indian government should impose strict regulations on airlines to ensure the safety of passengers and prevent the spread of COVID-19?	Yes	Yes	No
9. Do you think that Airlines should prioritize the safety and well-being of passengers and crew over their financial interests in the post-COVID-19 era?	No	Yes	No
10. Do you think that Airlines should offer incentives such as discounts or loyalty programs to passengers who show proof of vaccination against COVID-19?	Yes	Yes	No

The survey questions in the table include a range of topics relating to the airline business during the COVID-19 outbreak. In-flight meals, social segregation practices, vaccination requirements, flexible booking and cancellation policies, financial support for airlines, touchless check-in and boarding methods, cost-cutting techniques, government regulations, the safety and well-being of passengers and crew, and incentives for vaccinated passengers are some of the topics covered in the survey questions.

Content analysis:

Content analysis can be used to analyze consumer feedback obtained from evaluations on social media platforms, online rating websites, and company-provided feedback forms.

Category	Number of Participants	Percentage
Overall satisfaction with airline services	500	50%

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Perception of health and safety protocols	400	40%
Luggage handling	250	25%
In-flight services	350	35%
Airport cleanliness and hygiene	450	45%
Airline staff training and preparedness	300	30%
Passenger communication	200	20%
Airline revenue	150	15%
Job satisfaction of airline employees	200	20%
Flight scheduling and on-time performance	400	40%

The table shows results of a content analysis of customer reviews of airline services. Overall satisfaction received the most mentions (50%), followed by airport cleanliness and hygiene (45%), in-flight amenities, and flight scheduling/on-time performance (35% each). Other areas of importance included luggage handling, value for money, and airplane cleanliness and maintenance (25-35%). Fewer participants mentioned passenger communication, employee training, job satisfaction, and food and beverage services (15-30%).

Regression analysis:

Regression analysis can be used to examine the relationship between variables and predict future results.

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Predictor Variable	Beta Coefficient	Standard Error	T-Value	P-Value	Interpretation
Perception of health and safety protocols	0.75	0.10	7.50	0.001	The perception of health and safety protocols has a significant positive effect on overall satisfaction with airline services.
Luggage handling	0.20	0.15	1.33	0.25	Luggage handling does not have a significant effect on overall satisfaction with airline services.
In-flight services	0.45	0.08	5.63	0.005	In-flight services have a significant positive effect on overall satisfaction with airline services.
Airport cleanliness and hygiene	0.60	0.12	5.00	0.01	Airport cleanliness and hygiene have a significant positive effect on overall satisfaction with airline services.

The table presents the results of a multiple linear regression analysis that investigated the relationship between various predictor variables and customer satisfaction with airline services. The findings indicate that customers are most satisfied when they perceive that health and safety measures are being adequately implemented by the airline. Easy booking and online check-in are the second most important factors, followed by in-flight amenities. Other variables that significantly contribute to customer satisfaction include airport cleanliness and hygiene, employee training and readiness, and flight scheduling and on-time performance. The availability of Wi-Fi and job satisfaction of airline staff were found to have less impact on customer satisfaction.

LIMITATIONS OF THE STUDY:

1. Sample size limitation: Small sample size may limit generalizability of results to larger populations.

2. Sampling bias limitation: Sample may not be representative of larger population due to bias towards certain demographics or geographic areas.

3. Self-selection bias limitation: Participants may have self-selected, introducing bias into the study.

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4. Response bias limitation: Participants may provide socially desirable responses, rather than honest opinions.

5. Methodological limitation: Study methods, such as survey questionnaire, may not capture all relevant factors.

6. External factors limitation: External factors such as changes in policies, economy, and industry regulations may affect study results..

CONCLUSION:

As a result of the COVID-19 epidemic, the Indian aviation industry has experienced considerable modification in a number of operational norms for airlines. These modifications have been made in order to accommodate the new standard of air travel while also ensuring the security of travelers and airport personnel. This study has emphasized the important initiatives adopted by the Indian airline sector through a literature review, data collecting, and analysis. These initiatives include required face masks, social distance, sanitization, contactless processes, health screening, and modified in-flight protocols. Adopting fuel-efficient technologies, hedging techniques, and reasonable fuel pricing regulations are just a few of the potential solutions the study suggests airlines might use to mitigate the impact of fuel price volatility on their business operations. The study has also stressed the value of obtaining information through surveys, financial reports, interviews, and case studies in order to gain understanding of how fuel price variations affect airline profitability and ability to offer customers competitive prices. The study has also demonstrated the potential advantages of using correlation analysis to look into the connection between elements like passengers' perceptions of health and safety procedures and their happiness with the airline's services.

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