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AIR TRAVEL PASSENGERS' EXPECTATION: AN ANALYSIS OF STRUCTURAL EQUATION MODEL

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ABSTRACT

In the last decade, Airline Industry was one of the notable fastest growing industries in the world. In the current scenario, the Indian aviation sector is totally affected by many social, political, economical challenges. They are such as increase in ATF (Aviation Turbine Fuel), geographical conditions, terrorism, government conditions and policies. In a country like India, where 40% of the sector is dominated by the aviation sector, solving these problems and handling them will be one of the most crucial managerial challenges for the aviation industry and the executives those who are associated with it. In the recent era there was a huge entry of foreign markets have entered into the Indian sector. This badly affects the growth of Indian airlines. Recently due to this kind of problems some of the premier airlines have made a black mark in the delivery of performance. And there are some challenges where the industry may have to look deep into it for solving it. Those things are regarded with the weakness in airport infrastructure, airways infrastructure, national carriers, deep pockets, high cost structures etc. these things could be the important challenges for the sector in the current scenario. Finally all these could be tough handling managerial challenges for the aviation sector and for the body of members associated with it. The present study deals with the expectation and perception of air travel passengers.

Keywords: *Airline, Aviation, Black Mark, Infrastructure, Challenges.*

Introduction

In the current scenario of globalization Air Travel remains to be one of the fastest growing industries. It generates economic growth, world trade, international business, and most importantly tourism industry of the nation. And most importantly it drastically increases the level of country's GDP and also it increases the Net National Income (NNI). According to the census taken by IATA (International Air Transport Association) it tells that Air Travel in India has grown by an average of 6.6% by the past year. And it also predicts that the current form progress will be changed from 6.6% to 10% in the few more years. However airways still forms only a small part of the overall transportation services in India but it contributes a lump sum of profit to the country. In order to understand this many of the developing countries have realized the importance and huge benefits derived from it. In turn the concern governments have started to emphasize more on airline sector, by allocating adequate resources. All these things are done in a hope to increase the level of profit by the next few consecutive years. And especially in India where 40% of the sector is dominated by the aviation sector the Indian government had understood the importance of airline industry and the benefits which are derived from it. It is nevertheless to say the enhancement of airline industry in India over the few decades.

Need of the Study

Indian airline industry was one of the fastest growing airline industries across the world during the last decade. Privatization and liberalization have paved a good platform for the growth of Airline Industry over the past few decades. The rapid transformation in the business has gone from being a government owned industry to an industry which is primarily dominated by the privately owned airlines. Those kinds of airlines are engaged in providing both full services and low cost carriers. According to the status of Indian industries 40% of the sector is dominated by the Aviation sector. Even though the

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industry constitutes only of 40% it contributes a larger portion of income to the Indian government. When we take a look at the comparison among the profits contributed by different industries, airline industry stands in the next to the manufacturing companies. It acts as a giant in the contribution of income to the country. Supportive government initiatives and increasing private and public investments further boosted the industry. However, airways still forms only a few part of the overall transportation services in India. With carrying annual passenger traffic of around 96 million in 2007 compared to 6 billion passengers carried by railways in the same year. Airways seek income not by only offering service to people, and it also looks forward to earn income by the cargo. i.e. movement of goods from one place to another. Because of this logistic department, the country has also increased to a greater extent. Businessmen and industrialist never bother about the money which has to spend for sending the orders through flight. They always look at the saving time and they demand their operations have to be done in time and it yet it helps to yield a good reputation.

Statement of the Problem

Even though the country has saw a good profits and drastic growth in the recent era by the airline industry, but now the airline industry is affected by many challenges. Now the industry is gripped and knotted with many challenges. Such as increase in high aviation turbine fuel (ATF), excess capacity, high debt burden, poor infrastructure, regional connectivity, and improper security concerns. Aviation turbine fuel prices are one of the very big headaches for the Indian airline industry. (both for public and private organizations). Fuel charges cost around 80% if the total operating cost. ATF prices have almost doubled the year. Because of this problem many of the premier airline institutions continues to get plagued with the increase in the fuel charges. ATF prices have to be noted down crucially because it acts as an inverse relationship between the airline stock prices and fuel prices. The ATF prices are the tool for the organizations to fix the cost of the air ticket. The increase and decrease of the cost of the ticket all depends upon the price of the ATF prices. Skyrocketing ATF prices, depreciating rupee coupled with global recession has directly impacted the Indian Airline Industry. High ATF prices are the results in the loss of cutting routes, increasing fuel surcharges, promoting the use of e-tickets and charging for food items to reduce their losses. All these things could make a "BLACKMARK" in the delivery of good performance to the customers. Due to the drastic increase in passenger traffic over the last 3 decades, almost all Indian air carriers build their capacity assuming that growth would remain idle. But that doesn't happen for some time many of the leading airlines have bought several new aircrafts which have resulted in the big loss of 15% to 20%. Good times were helped airlines to earn a good profit through their performance. According to the industry experts around 17% of the current fleet are scheduled for the next three years have been delivered with recession. Even though the industry grew above by 40% almost half of the growth was primarily stimulated due to low fares. The profit was met out for only equalizing the past losses and expenses. In the current economic global slowdown maintaining such low levels of fares will be difficult for them to increase the profits which are scheduled. So therefore consolidation would be the next logical step for them to get relief from the problem.

Objectives of the Study

- To know the expectations of air travel passengers with Indian airlines.
- To analyze the perception of air travel passengers with Indian airlines.
- To identify the relationship between expectations and perception air travel passengers.
- To provide suitable suggestions to improve the airline services.

Materials and Methods

Bitner and Hubbert (1994) determined that service encounter satisfaction was quite different from overall satisfaction and perceived quality. Adding to the debate about the difference between service quality and satisfaction, customer satisfaction has also been operational-zed as a multidimensional erect along the same proportions that constitute service quality. David, Mc., A. Baker (2013) aimed that the study was to look at the service quality and customer satisfaction of the top fourteen U.S. airlines between the year of 2007 to 2011 using data from the Department of Transportation Air Travel Reports. The objectives of this study were to compare customer satisfaction and service quality with respect to airlines excellence dimensions and subsequently to establish the relationships between the dimensions of service quality and customers' satisfaction on airlines services.

The validity of any research depends on the systematic method of collecting the data, and analyzing the same in a sequential order. In the present study, extensive uses of both primary and secondary data were made. For collecting the primary data, field survey technique was employed in the

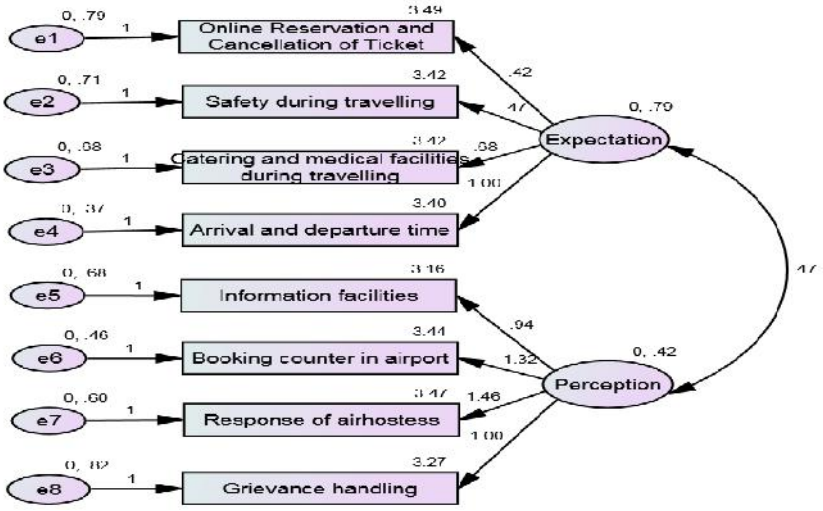
study. First-hand information was collected from 100 respondents of Coimbatore airport. The respondents were selected randomly from the list of passengers. In order to fulfill the objectives set, a sample study was undertaken by using a well-framed questionnaire that was duly filled by the respondents. Respondents with varying background were selected based on the important aspects of their occupation, education, age, area etc and their priority and expectations especially online reservation and cancellation of ticket, Safety during traveling, Catering and medical facilities during traveling, Arrival and departure time, Information facilities, Booking counter in airport, Response of airhostess and Grievance handling. The primary data were supplemented by a spate of secondary sources of data. The secondary data pertaining to the study was gathered from the various records, books, journals and web resources. Structural Equation modeling was used for further analysis.

Results and Discussion

Structural Equation Modeling (SEM)

Structural Equation Modeling is a very general statistical modeling technique, which is widely used in the behavioural sciences. It can be viewed as a combination of factor analysis and regression or path analysis. The interest in SEM is often on theoretical constructs, which are represented by the latent factors. The relationships between the theoretical constructs are represented by regression or path coefficients between the factors. The structural equation model implies a structure for the covariances between the observed variables, which provides the alternative name covariance structure modeling. However, the model can be extended to include means of observed variables or factors in the model, which makes covariance structure modeling a less accurate name. Structural Equation Modeling provides a convenient framework for statistical analysis that includes several traditional multivariate procedures, for example factor analysis, regression analysis, discriminant analysis, and canonical correlation, as special cases. Structural equation models are often visualized by a graphical path diagram. The statistical model is usually represented in a set of matrix equations.

Research Model



Validity of the Measurements

In structural equation modeling, the confirmatory factor model is imposed on the data. In this case, the purpose of structural equation modeling is twofold. First, it aims to obtain estimates of the parameters of the model, i.e. the factor loadings, the variances and covariances of the factor, and the residual error variances of the observed variables. The second purpose is to assess the fit of the model, i.e. to assess whether the model itself provides a good fit to the data. The ability of SEM to produce a meaningful identification of the correlations between factors is a key strength. In multiple regression analysis, generally assume that the independent variables are correlated as the two-headed arrows between the predictor variables. The residual error in multiple regression analysis is actually an unobserved, latent variable. Note that to fix the loading of the residual error factor to one, to achieve identification. To obtain un-standardized and standardized regression weights, a variance estimate for the residual errors and the squared multiple correlation of the dependent variable 'Expectation and

Perception of air travel passengers'. In this case, the calculated value of chi-square test is 241.96 on 19 degrees of freedom, which gives a p-value of 0.00 and this model is a good fit for the analysis. The real strength of SEM is to estimate more complicated path models, with intervening variables between the independent and dependent variables, and latent factor as well.

Table 1: Regression Weights

Measured Variable		Latent Variable	Estimate	S.E.	C.R.	P
online reservation and cancellation of ticket	<---	Expectation	.420	.121	3.476	1%
Safety during traveling	<---	Expectation	.473	.118	4.012	1%
Catering and medical facilities during traveling	<---	Expectation	.676	.129	5.232	1%
Arrival and departure time	<---	Expectation	1.000	-	-	-
Information facilities	<---	Perception	.945	.206	4.584	1%
Booking counter in airport	<---	Perception	1.316	.243	5.422	1%
Response of airhostess	<---	Perception	1.459	.270	5.395	1%
Grievance handling	<---	Perception	1.000	-	-	-

The above table shows the regression coefficient of the exogenous variables. It is noted that the critical ratio of online reservation and cancellation of ticket, Safety during traveling, Catering and medical facilities during traveling, Information facilities, Booking counter in airport and Response of airhostess is above the table value 2.962 and it is significant at 1 percent level. Among the selected eight variables, online reservation and cancellation of ticket, Safety during traveling, Catering and medical facilities during traveling, Information facilities, Booking counter in airport and Response of airhostess are the most influenced factors for passengers expectation.

Model Fit Summary

Table 2: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	25	241.96	19	.189	1.273
Saturated model	44	.000	0		
Independence model	16	236.936	28	.000	8.462

CMIN is a chi-square statistics comparing the default model and the independence model with the saturated model. The above table infers that the default model has been associated as 1.273 percent with saturated model and other side, the independence model has been associated as 8.462 percent with saturated model.

Table 3: Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.902	.850	.976	.963	.975
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

From the above table, it is noted that the model fit indices are good fit with the evidence of NFI (0.902) and CFI (0.975) which is greater than 0.9.

Table 4: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.043	.000	.108	.433
Independence model	.275	.243	.307	.000

It could be noted from the above table that the RMSEA value is 0.043 which is lesser than 0.05 and the model resulted as good fit.

Findings and Suggestion

From the path diagram, measured variables with latent variable of expectation and perception is having positive relationship and also significant at 1 percent and 5 percent level. The analysis of the model and from the viewpoint of the antecedent of successful operation, suggests that all the measured variables are significantly influence on expectation and perception of airway passengers.

Even though increasing healthy profits and passenger traffic has helped airlines to earn profit and it was affected by a huge high debt burden. Many of the premier airline institutions in India have borrowed a huge amount of money from financial institutions within and across the globe. It was done

with the objective to increase the business plans of their agency. But unexpectedly it didn't work out to compensate the loss and expenses of the previous and the current year. Even though the country takes front steps to upgrade the infrastructure of major airports in Mumbai, Delhi, Hyderabad, the high debt burden affects the plan. Maintenance of air traffic control infrastructure is grossly inadequate if the industry to grow any further. It totally crumbles the whole operation.

Security concerns remain one of the big challenges for the Indian airline industry. In the recent times our country was suffered by many frequent terrorist attacks. All these happen because of the poor performance of the security systems which are inbuilt in the airports. So the security systems have to be made stronger to avoid these kinds of attacks from the foreign intruders. Subsequently, it is noted that the entry of smuggling and illegal flow of goods are more, which is drastically reputed brands and its company's image. It also adversely affects the marketing strategy and position of the whole country. When the process remains to be the same, India will become the trade centre for the entry of smuggled and illegal goods. So the existing security systems should be made very strict for the entry of spurious goods entering the nation illegally.

It is suggested that a good market survey should be conducted to identify the expectation of the passengers using airline services and their need should be fulfilled and make them as delighted customers. The air crew operators should concentrate more on scheduling of arrival and departure time of airlines and further it is emphasized that world class catering services and medical facilities should be provided

Conclusion

Regional connectivity is the part which may have to be handled with care. Even the airlines of the country flies across the globe, the condition of regional connectivity remains to be poor. The particular airlines don't concentrate over the connections which are presented over the regional areas. Even though the industry is weighted down with excess capacity, regional connectivity continues to be poor. The main reason for the poor regional connectivity is due to lack of infrastructure in the regional airports. It is concluded that it is better to focus on developing the regional connectivity instead of concentrating metros and redeploying current regional connections. Because it will help the modern fleet to routes where there is demand will help them to manage the excess capacity.

References

1. Anderson, E., Fornell, C., and Lehmann, D.R., (1994), "Customer satisfaction, Market share, and Profitability- Findings from Sweden", Journal of Marketing, Vol. 58(1), pp. 53-66.
2. Belobaba, P., J. Van Acker (1994), "Airline Market Concentration- An Analysis of US Origin-Destination Markets", Journal of Air Transport Management, Vol. 1, pp. 5-14.
3. Bitner, M.J., and Hubbert, A.R., (1994), "Encounter satisfaction versus overall satisfaction versus quality", In R.T. Rust and R.L. Oliver (Eds.), "Service quality: New directions in theory and practice", Thousand Oaks: Sage Publications, pp. 72-94.
4. Baker, A., (2013), "Service Quality and Customer Satisfaction in the Airline Industry: A Comparison between Legacy Airlines and Low-Cost Airlines", American Journal of Tourism Research Vol. 2, No. 1, pp. 67-77.
5. Dempsey, P., (1990), "Airline Deregulation and Laissez-Faire Mythology- Economic Theory in Turbulence", Journal of Air Law and Commerce, Vol. 56, pp. 305-412.
6. Hallowell, R., (1996), "The Relationships of Customer Satisfaction, Customer Loyalty and Profitability: An Empirical Study" International Journal of Service Industry Management, Vol. 7(4), pp. 27-42.
7. Sureshchandar, G.S., Rajendran, C., and Anantharaman, R.N., (2002), "The Relationship between Service Quality and Customer Satisfaction – A Factor Specific Approach", Journal of Service Marketing, Vol. 16(4), pp. 363-379.
8. Zeithaml, V. A., Parasuraman, A., and Berry, L.L., (1990), "Delivering quality service: Balancing customer perceptions and expectations", New York, NY: The Free Press.