

Factors Influencing the Airline Decision-Making Process in Planning Pricing Mechanisms in the Nigerian Aviation Industry

Labake Temitope Adamolugbe*, Chijioke Udechukwu Akpudo, Mobolaji Stephen Stephens,
Chukwuemeka Albert Enyinda

Department of Logistics and Transport Technology, Federal University of Technology, Akure, Nigeria

*Corresponding Author

DOI: <https://dx.doi.org/10.47772/IJRISS.2023.7011058>

Received: 26 October 2023; Revised: 02 November 2023; Accepted: 06 November 2023; Published: 07 December 2023

ABSTRACT

The airline industry is faced with a lot of challenges based on their various operations in terms of the carriage of goods and passengers. Part of this challenge is the issue of the best pricing strategies to be adopted. Prior to setting fare, the airline industry considered a number factors before the decision is implemented looking at customer satisfaction and profit making. Therefore, based on that, this study set out to assess the factors that influence airline pricing decisions in the Nigerian airline industry. The scope of the study covers all the domestic airlines operating in Nigeria. A questionnaire was administered to three hundred forty-nine staff consist of three categories of staffers (directorate, managerial, and supervisory) of all the domestic airlines in Nigeria. The collected data were analyzed using multiple regression analysis. Eleven variables (factors) were selected as attributes and tested. These include: demand, cost of inputs and supply, prevailing market airfare price, prices (fares) of alternative modes, route status, period (time) of supply and demand, distance between origin and destination, landing fees, availability of slots in peak periods, security on the origin-destination (O-D) market, and availability of aircraft maintenance. The results revealed that distance between the origin and destination, time of supply, and demand are the most significant factors influencing airline pricing decisions in the Nigerian airline industry. Therefore, based on the findings of the study, the study recommends that the airline industry must ensure that passengers are fully informed if prices are changed and also ensure the security of passengers from origin to destination.

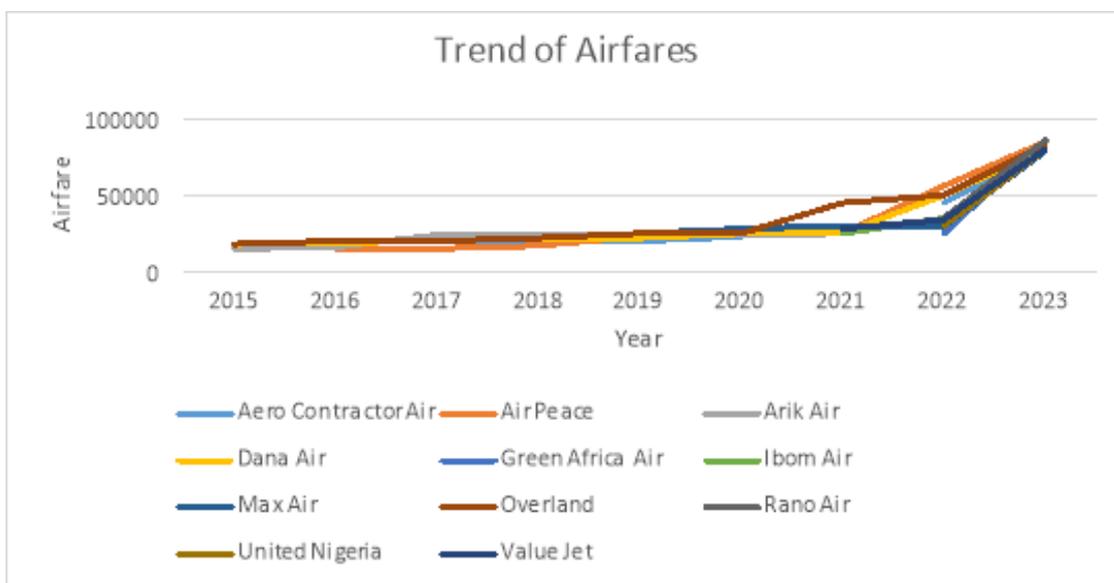
Keywords: Airline, Origin, Destination, Pricing, Decision-making,

INTRODUCTION

The aviation industry all over the world saw several advancements as new aircraft and technologies were put into service in the early 20th century. These advancements in technology have enabled the aviation sector to significantly contribute to the development of the nation's overall [1]. The introduction of several technologies in the operation of airlines, when the first regularly scheduled commercial airline took to the skies in 1914 [2], created a lot of market structure in the air transport sector, according to [3]. Given the significant stages of expansion and advancement the sector has had, one of the most significant characteristics of the air service industry today is the disparity between travelers' expectations and views and what is really given and delivered [4]. The passenger viewed the expectation based on the value of the air ticket that was placed for the trip [5]. According to [6], the choice of airline, especially where there are several operators, was determined by the price of air tickets. This was supported by [7] by establishing the top 3 factors, such as ticket pricing, flight schedules, and onboard comfort, as the key determinants of the

chosen airline. Recent events observed in the sector have made pricing the only but most important component of the marketing mix that is subject to constant change, compared to any other component, including the product [8]. Pricing air tickets in the aviation industry, which has always been a management challenge, is thus one of the major issues facing airline administration [9], especially in the Nigerian aviation sector. This change in the price of air tickets, according to [9], might be the result of many factors, such as operational costs, landing costs, maintenance costs, and any other costs. The Nigerian pricing scenario in the past years, as shown in Figure 1, show that airlines charge about the same things, which is almost the same fare, which is usually determined by the leading airlines as they have a cartel that collates to determine prices even though they don't determine the supplied passenger kilometers (ASK). The price had been gradually increasing over the years, but almost the same for all aircraft, regardless of the variations in quality of service and the inhibitors to passengers.

Figure 1: The trends of airlines fare from 2015 to 2023



Source: Author computation (2023)

In a search for a strategy to overcome the above challenges, the price of air tickets across the registered airline operators in Nigeria increased. But the question that was left unanswered was: What are the factors influencing the airline decision-making process in planning pricing mechanisms? Therefore, it is at this point that the study seeks to examine the factors that influenced airline decisions in planning pricing mechanisms in the Nigerian aviation industry. This stands as the reason for the study.

LITERATURE REVIEW

Numerous researchers examined the effects of various factors on airline ticket costs. For instance, [10] examined the various elements airlines look into before developing pricing strategies for routes in southern Italy. The pricing tactics used in the origin-destination of full-service carriers and low-cost airlines are assessed in the study. From the result of the regression analysis, it was revealed that airlines can raise prices as a result of market power brought on by greater market concentration. [11] examined the factors influenced the price of air ticket and choice of airline used in southern Demark. Study on the variables influencing air travelers' decision to fly with a particular carrier within Nigeria by [12]. There is no multi-collinearity problem, it was found. Additionally, a stepwise regression analysis was performed to identify the variables/attributes that had a significant impact on air travelers' decision to choose a particular airline.

NLOGIT was used to conduct a discrete choice-modelling analysis to further confirm the regression analysis's findings. The two findings indicated that sex, age, marital status, wealth, comfort, on-board amenities, frequency, staff behavior, fare, and monopoly power are key elements that affect how passengers choose their airline. [13] evaluated pricing tactics based on the tracking of airfare costs across various markets time and frames.

The study takes into account a number of variables that affect the price of airline tickets, including market type, competitors, peak season, peak time, fuel costs, and environmental costs. It was revealed from the study that numerous factors influence pricing tactics and, thus, the actual ticket price. [14] Examined whether airline businesses' pricing strategies are connected with those of their rivals and based their research analysis on data from the London-Paris market. The strategies of network and low-cost carriers were both examined, and the general conclusion is that network airlines do not follow low-cost carriers' pricing adjustments; rather, some airlines cut rates when the prices of potential competitors rise. Additionally, they discovered evidence in this research that all airlines follow a pattern of raising pricing as departure day approaches. [15] studied the European airline market by compiling ticket price information for all flights departing from the Nice airport on that continent, as well as [16], who looked at airline competition on routes between the UK and Ireland, and others, all provide evidence that ticket prices are frequently rising over time until the day of departure. In the study of [17] on the pricing strategy on the European airline market using the London-Amsterdam route as an example, it was found that prices typically rise by about 3% per day in the days leading up to departure, reaching an all-time high of 80% in the final 20 days before departure. [18] Study the US airline market and the airlines' dynamic pricing practices. It was revealed that some airlines change their prices based on load factors made by their rival's competitor and, in some cases, raise rates when no more seats are available on flights operated by their competitors. [19] Looked at the factors that affect airline ticket prices in hub-to-hub marketplaces. The study established that low-fare carriers, particularly Southwest Airlines, influence airline market pricing. Study by [20] on airline selection from a Nigerian perspective to identify the elements or attributes that significantly influenced air travelers' decisions to choose an airline, a stepwise regression analysis was conducted. NLOGIT was used to conduct a discrete choice-modeling analysis to further confirm the regression analysis's findings. The two findings indicated that sex, age, marital status, wealth, comfort, on-board amenities, frequency, staff behavior, fare, and monopoly power are key elements that affect how passengers choose their airline. In the recent study by [21], which explores several variables to confirm airport and airline characteristics as demand factors for domestic air travel in Nigeria using exploratory and confirmatory analysis, the variable presented for the analysis was rank on the 5-point Likert scale. Based on the result, exploratory factor analysis reduces the variable to four orthogonal factors. Further, the results show that confirmatory factor analysis validates airport and airline service, demographics, economic factors, and airport size and facilities as significant factors affecting passenger traffic at domestic airports in Nigeria.

METHODOLOGY

The aim of this study is to examine the factors that influenced the airline decision-making process in planning pricing mechanisms in Nigeria. To this end, this study adopts the survey method of research design as it explores the factors influencing the airline decision-making process when determining the price of air tickets in Nigeria. The data for the study were sourced from primary data obtained through the administration of a questionnaire to the targeted population. The study involved all the airlines operating in Nigeria, such as Air Peace, Allied Air, Arik Air, Aero Contractors, Azman Air, Dana Air, Dornier Aviation Nigeria, Rano Air, Green Africa Airways, Ibom Air, Kabo Air, Max Air, Overland Airways, United Nigeria Airlines, Value Jet, West Link Airlines, and TAT Nigeria. Therefore, the population and the sampling frame for the study consisted of airline workers (staffers) that fall into these three categories, namely: directorate, managerial, and supervisory classes of workers, as presented in Table 1. The choice of this group is because of their involvement in price decision-making at airlines, such as airfare.

Table 1: Population of the study

	Airlines															Total
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
Director	15	8	13	12	11	11	7	8	5	5	10	5	1	3	8	122
Managerial	10	15	9	13	8	10	6	8	9	7	6	6	7	6	7	127
Supervisory	13	7	10	6	9	6	6	8	4	4	6	4	5	6	6	100
	38	30	32	31	28	27	19	24	18	16	22	15	13	15	21	349

Source: Author compilation (2023)

Note: A (air peace), B (Aero air), C (Overland), D (Arik air), E (Dana air), F (Green Africa), G (Max air), H (Azman air), I (Ibom air), J (Value jet), K (United Nigeria), L (Rano air), M (Bristol He), N (Dornier air), O (Allied air).

Hence, the total of three hundred and forty-nine target populations of the study was used as the sample size. This was in line with the work of Stephen (2018). The questionnaire distributed for the study was a total of three hundred and forty-nine using the online method. However, the response rate shows that 92% of the questionnaires distributed were returned. The data collected were summarized and analyzed in line with the data requirements of the study with the aid of the Microsoft Excel statistical package version 2020. Multiple regression analysis was used to determine the significant factors. The multiple regression model for the study is presented below:

$$Y = f(x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8, x_9, x_{10}, x_{11}) \dots \dots \dots (1)$$

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \beta_8x_8 + \beta_9x_9 + \beta_{10}x_{10} + \beta_{11}x_{11} + e \dots \dots \dots (2)$$

Where Y is Factor influencing airline pricing mechanism (F_{apm}), β_i is coefficient of the intercept; β_1, \dots, β_7 are the coefficients of the independent variables, e is the error term that is assumed to be associated with the variables,

- x_1 is Distance between origin and destination (DOD),
- x_2 is Availability of slot in the peak periods (App),
- x_3 is Route status (RS),
- x_4 is Period (time) of supply/demand (Psd),
- x_5 is prices (fares) of alternative modes (P_{atm}),
- x_6 is Demand (D),
- x_7 is cost of input (C),
- x_8 is Prevailing market airfare (price) (PMA),
- x_9 is Landing fees (Lf),
- x_{10} is security on the origin – destination (O – D) market (Sodm)
- x_{11} is Availability of aircraft maintenance facility (Aamf)

RESULT AND DISCUSSIONS

A. Factors influencing airline decision-making process in planning pricing mechanism

i. Factors influencing airline decision-making process in planning pricing mechanism as observed by all the airline directors

Table 2 shows the factors influencing airline decision-making processes in planning price strategies based on director perceptions. It is obvious that the most significant factor in price planning strategies was observed to be the distance between origin and destination, as it had a p-value of 0.000012. The next factors that influence the airline decision-making process in planning price strategies, as observed by the director, are availability of slots in the peak periods (p-value of 0.000082), route status (p-value of 0.008317), demand (p-value of 0.012038), period (time) of supply and demand (0.015771), and cost of input (0.039802). It was revealed from the analysis that prevailing market airfare, landing fees, security on the origin-destination market, and availability of aircraft maintenance facilities have no influence on the airline decision-making process in planning the price of an airline in Nigeria. The results of the regression were acceptable because the R-square showed that 73.7 percent of the 102 observations fit well into the model that the regression generated, given a standard error margin of 9.14 for the eleven independent variables and other variables not captured. The analysis of variance showed that the variables were highly correlated, as the p-value for the ANOVA showed a value well below the 95% significance level adopted.

Table 2 Director Perspective on the factors influencing airline decision-making process in planning pricing mechanism

Multiple R	0.858725
R Square	0.737409
Adjusted R Square	0.704743
Standard Error	9.145292
Observations	102

ANOVA

	df	SS	MS	F	Significance F
Regression	11	26070.36	2370.033	28.33735	3.38974E-27
Residual	91	9283.637	83.63637		
Total	102	35354			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	21.97331	5.881913	3.735742	0.000298	10.31673632	33.62988	10.31674	33.62988
Distance b/w Origins and destinations	0.322987	0.579371	2.730079	0.000012	0.027797535	0.571049	0.72508	0.571049
Availability of slot in the peak periods	0.11874	0.586037	-0.20262	0.000082	0.28001508	0.042528	0.28002	0.042528

Route status	0.008742	0.595646	0.014676	0.008317	0.08157076	0.189054	0.17157	0.189054
Period (time) of supply/demand	0.2912	0.578615	0.503271	0.015771	0.85536402	0.437764	0.85536	0.437764
Prices (fares) of alternative modes	0.038104	0.575079	0.066258	0.947291	0.10145409	1.177662	-1.10145	1.177662
Demand	0.067529	0.120574	0.123355	0.012038	0.002859	0.0878	0.026823	1.230878
Cost of input (fuel etc) and supply	0.118674	0.586037	-0.20262	0.039802	1.28001508	1.042528	-1.28002	1.042528
Prevailing market airfare (price)	0.052922	0.013464	1.79781	0.08198	-0.00989	0.036275	-0.01539	0.071298
Landing fees	0.298233	0.593986	0.502088	0.6166	-0.87878909	1.475256	-0.87879	1.475256
Security on the Origin-Destination (O-D)	0.756621	0.61538	1.229519	0.221477	-0.46279472	1.976037	-0.46279	1.976037
Availability of aircraft maintenance facility	0.80163	0.59878	1.338773	0.18338	-0.38489148	1.988152	-0.38489	1.988152

Source: Author’s finding (2023)

ii. Factors influencing the airline decision-making process in planning pricing mechanisms, as observed by all the airline managers

Table 3 revealed the multiple regression analysis of the factors influencing the airline decision-making process in planning price strategies based on the managerial perceptions of Nigerian airlines. From the analysis, it shows that out of eleven factors listed, only five variables show a p-value less than 0.05, namely distance between origins and destinations, availability of slots in peak periods, period of supply, demand, and cost of input. The results of the regression were acceptable because the R-square showed that 74.2 percent of the 119 observations fit well into the model that the regression generated, given a standard error margin of 9.37 for the eleven independent variables and other variables not captured. The analysis of variance showed that the variables were highly correlated, as the p-value for the ANOVA showed a value well below the 95% significance level adopted.

Table 3: Factors influencing airline decision-making process in planning pricing mechanism as observed by the managers

Regression Statistics	
Multiple R	0.861699
R Square	0.742525
Adjusted R Square	0.711708

Standard Error	9.373897
Observations	119

ANOVA					
	Df	SS	MS	F	Significance F
Regression	11	29395.09	2672.281	30.41177	4.79907E-29
Residual	108	10192.91	87.86995		
Total	119	39588			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	12.08894	6.56112	1.842511	0.067976	-0.90737748	25.08525	-0.90738	25.08525
Distance b/w Origins and destinations	0.627981	0.485758	1.781229	0.000102	0.02781204	0.874921	0.91833	0.893272
Availability of slot in the peak periods	0.094804	0.209671	0.985122	0.009012	0.9039811	0.009222	0.90122	0.109422
Route status	0.981111	0.892311	0.190116	0.050921	0.8957016	1.189123	1.27122	1.189022
Period (time) of supply	0.122911	0.198325	1.527120	0.001121	0.1009322	0.875432	0.28172	1.119187
Prices (fares) of alternative modes	-0.038132	0.47609	0.125876	0.147209	0.872611	0.176980	1.10982	1.821617
Demand	0.987112	0.34518	0.32900	0.010922	0.0673282	0.190815	0.029814	1.712553
Cost of input (fuel etc) and supply	0.867193	0.47860	0.20200	0.010933	1.321500	1.009212	1.489011	1.436991
Prevailing market airfare (price)	0.18990	0.981222	0.197223	0.103198	-0.012012	2.046589	-1.00932	0.522232
Landing fees	0.672132	0.375991	0.235516	0.901222	-0.1887536	1.652984	0.872222	1.908633
Security on the Origin-Destination (O-D)	0.562141	0.123338	1.901287	1.298833	-0.2672322	1.092211	-0.87363	1.100091
Availability of aircraft maintenance facility	0.100093	0.093333	1.871117	0.518302	-0.3536398	0.673332	0.892222	1.329111

Source: Author's finding (2023)

iii. Factors influencing airline decision-making process in planning pricing mechanism, as observed by all the airline supervisory

Table 4 shows the results of the factors influencing the airline decision-making process in planning pricing mechanisms as observed by all the airline supervisors. The results also show that distance between origin and destination is the major factor influencing the decision in the price of airlines in Nigeria, with a p-value of 0.004007, followed by period of supply with a p-value of 0.008351. Other remaining factors show a p-value of more than 0.05, which implies that there is no significant influence when the price of an airline ticket is determined.

Generally, going by the results from the director, managers, and supervisor of the airline in Nigeria, it shows that distance between origin and destination, availability of slots in the peak period, status, period of supply, demand, and cost of input are the major factors influencing the airline decision-making process in planning the pricing of air tickets in the Nigerian aviation sector. It is obvious that the most significant factor in price planning strategies was observed to be the distance between the origin and destination. This is true because the distance between the origin and destination will determine the amount of fuel consumption for the trip, which forms a significant part of operating costs for airlines [22]. The availability of a slot during the peak period is the second most significant factor when it comes to pricing strategies for flight tickets. Why? This is because many flyers (passengers) want to travel during the peak periods, and airlines jostle among themselves for available slots in the peak windows, making these slots relatively expensive, so that the incremental costs of securing the slots are now transferred to the passengers. This is in agreement with [23], where the structure of the air transport industry The viability of routes signifies their status, and this was seen as a significant factor that was considered in airline pricing strategies. The more viable and the higher the patronage a route assures, the higher the airfare such a route will attract. This obeys the simple law of demand and supply. The route status helps the airlines assess the competitive landscape on a particular route by looking into some factors such as the number of airlines operating on the route, their market share, possible frequencies, and slots in the peak period to reach a particular pricing strategy. The period (time) of supply was observed to be the next most significant factor. The demand and supply period has a great influence on the pricing of airfares. When demand is higher than supply, it is expected that, all things being equal, prices will increase, so this finding can be said to be in agreement with the economic theory of demand and supply equilibrium. Prices (fares) of alternative modes are shown to be another significant factor. If the fares of alternative modes are high and those of airlines are adjudged to be relatively low when considering the advantages they bring, pricing strategies can be significantly tied to the prices of those alternatives, most of which have time of journey as a major disadvantage. Demand was observed to be among the significant factors influencing the pricing strategies of airlines in Nigeria. This is also in agreement with the law of demand and supply, so it is expected to be a significant factor in pricing strategies. The ability to match supply with demand is highly dependent on the cost of inputs. The cost of inputs was also seen as significant. This showed that the higher the cost of input, the higher the cost of operations will be, and this will in turn be transferred to the passenger with increased airfares, hence the significance that it revealed. This is also in agreement with Alubankudi et al. (2023).

Table 4: Factors influencing airline decision-making process in planning pricing mechanism as observed by the supervisors

Regression Statistics	
Multiple R	0.868935
R Square	0.755048
Adjusted R Square	0.71629
Standard Error	9.354587
Observations	91

ANOVA					
	df	SS	MS	F	Significance F
Regression	11	24006.76	2182.433	24.93973	1.66357E-22
Residual	80	7788.238	87.50829		
Total	91	31795			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	17.47786	6.394774	2.733147	0.007582	4.769586839	30.18613	4.769587	30.18613
Distance b/w Origins and destinations	-0.43598	0.665386	-0.65523	0.004007	-1.75809002	0.886124	-1.75809	0.886124
Availability of slot in the peak periods	0.903538	0.641473	1.408537	0.162456	-0.37105499	2.178132	-0.37105	2.178132
Route status	0.647791	0.701022	0.924067	0.35795	-0.7451247	2.040707	-0.74512	2.040707
Period (time) of supply	1.381561	0.657163	2.10231	0.008351	0.075791327	2.687331	0.075791	2.687331
Prices (fares) of alternative modes	0.890226	0.652583	1.364156	0.175958	-0.40644381	2.186895	-0.40644	2.186895
Demand	0.119828	0.616317	0.194426	0.846286	-1.10478003	1.344436	-1.10478	1.344436
Cost of input (fuel etc) and supply	-0.02553	0.666269	-0.03831	0.969525	-1.3493877	1.298336	-1.34939	1.298336
Prevailing market airfare (price)	0.432227	0.645916	0.669169	0.50512	-0.85119383	1.715648	-0.85119	1.715648
Landing fees	0.222453	0.662804	0.335624	0.737944	-1.09452368	1.53943	-1.09452	1.53943
Security on the Origin-Destination (O-D)	0.492412	0.642596	0.766286	0.445534	-0.78441188	1.769236	-0.78441	1.769236
Availability of aircraft maintenance facility	0.467236	0.624694	0.747943	0.456466	-0.77401842	1.70849	-0.77402	1.70849

Source: Author's finding (2023)

CONCLUSION

In conclusion, the aim of the study was achieved through the adoption of descriptive and inferential statistics (multiple regression). The study selected all the domestic airlines operating in Nigeria as part of those that formed the respondents. Considering the operations of airline transportation globally, it is not limited to Nigeria alone but it cuts across the globe, making it an international issue. The significant factors influencing airline decisions when planning airfare were also revealed using director, manager, and supervisor perspectives. Out of the eleven factors selected and analyzed, distance between origin and destination and time of supply and demand were seen to be common factors influencing the decision of airline fare among the three categories of staff selected, which indicates that the airline industry must consider distance between origin and destination and time of supply before fixing their fare. Airline pricing strategies mainly depend on the decisions of the company itself and on revenue management, which they apply when managing revenues. It is generally acknowledged that demand affects the ticket price. If the demand is greater than the supply, ticket prices are increasing. If the demand for air travel is less than what airlines offer, the market can expect more discount tickets. Therefore, based on the findings of the study, the study recommends that the airline industry must ensure that passengers are fully informed if prices are changed and also ensure the security of passengers from origin to destination.

REFERENCE

1. O. A Adetayo, "Factors influencing willingness to repurchase airlines service in Nigeria", PhD. Thesis presented at the Federal University of technology Akure, published by Research Square, **2022**
2. S. Truxal, "Competition and Regulation in the Airline Industry: Puppets in Chaos," In *Research in Competition Law* (1st ed.), Abingdon: Routledge, **2013**.
3. R. Rapp, "Customer relationship marketing in the airline industry,". In T. Hennig-Thurau, & U. Hansen, "Relationship Marketing: gaining competitive advantage through customer satisfaction and customer retention", Berlin: Springer, **2000**
4. H. Mamo, "Key factors that determine return on loyalty: evidence from Ethiopian airlines loyal customer base", Master's thesis, Addis Ababa University, **2015**.
5. D. Rafai, P. Shokrollahi, "The Impact of expectation & perception on customer satisfaction in airline industry (A case study of Mahan Air)", Master's thesis presented at Sharif University of Technology International Campus, **2011**
6. H. B. Young, R. G Javalgi, "International marketing research: A global project management perspective", *Business Horizons*, Vol. **50**, **2007**
7. IATA Economics, "Airline loyalty – what matters most?", Retrieved from <http://www.iata.org/publications/economics/Reports/chart-of-the-week/chart-of-the-week>, **2016**
8. K. Lee, S. Carter, "Global Marketing Management: Changes, New Challenges, and Strategies (3rd ed.)", Oxford: Oxford University Press, **2012**
9. R. Donnelly, & G. Harrison, "CIM Coursebook: The Marketing Planning Process (1st ed.)", Routledge, **2010**
10. R. R. Mohamed, M. H. Mostafa, "Airlines' Pricing Strategies and O-D Markets: Theoretical and practical pricing strategies", *Journal of Travel, Tourism and Recreation*, Vol. **2**, Issue **3**, pp. **19- 36**, **2020**
11. W. O Jin, "Factors influenced the price of air ticket and choice of airline used in southern Demark", *International Journal of transport study*, Vol **4**, pp. **71-83**, **2021**.
12. W. I Ukpere, M.S Stephens, C.C Ikeogu, C. C. Ibe, E.O. Akpan, E. O., "Determinants of airline choice-making: The Nigerian perspective", *African Journal of Business Management*, Vol. **6**, No. **15**, pp. **5442 – 5455**, **2012**.
13. F. Lubomir, H. Jakub, "Airline Strategic in European Airline Market", *Journal of Transport*

Engineering, Vol.8, No. 2, 2013

14. E. Pels, P. Rietveld, “Airline pricing behaviour in the London–Paris market”, *Journal of Air Transport Management*, Vol. 10, Issue 4, pp. 277- 281, 2014
15. S. Giaume, S. Guillou, “Price discrimination and concentration in European airline markets”, *Journal of Air Transport Management*, Vol. 10, No. 5, pp. 305 – 310, 2004
16. A. A Gaggero, C.A Piga, “Airline competition in the British Isles”, In *Transportation Research Part E: Logistics and Transportation Review*, Vol. 46, pp. 270 – 279, 2010
17. M. Alderighi, N. Cento, “A case study of pricing strategies in European airline markets: The London–Amsterdam route”, *Journal of Air Transport Management*, Vol. 17, No. 6, pp. 369- 373, 2011
18. M.V Timothy, “Airfare pricing determinants in hub-to-hub markets”, *Journal of Transport Geography*, Vol. 14, No 3, pp. 15-22, 2006.
19. R. Clark, N. Vincent, “Capacity-contingent pricing and competition in the airline industry”, *Journal of Air Transport Management*, Vol. 2, Issue 4, pp. 7 – 11, 2012.
20. A. J Adenigbo, O. Ofumwengbe, O.A Kanyio, “Exploratory and confirmatory analysis to identify airports and airlines characteristics as factors influencing domestic passenger traffic in Nigeria”, *Journal of Sustainable Development of Transport and Logistics*, Vol.7, Issue 1, pp. 36-50, 2022
21. W. I Ukpere, M.S Stephens, C.C Ikeogu, C. C. Ibe, E.O. Akpan, E. O., “Determinants of airline choice-making: The Nigerian perspective”, *African Journal of Business Management*, Vol. 6, No. 15, pp. 5442 – 5455, 2012.
22. A. O Adeniran, M.S Stephens, “Gap analysis of service quality delivery in the Murtala Muhammed International Airport (MMIA), Lagos, Nigeria”, *SSRG International Journal of Industrial Engineering*, Vol. 6, No. 2, pp. 1-10, 2019
23. O. R. Alubankudi, C.U Akpudo, M.S Stephens, T.C Nwachukwu, “Trend analysis of the operational costs of domestic airline in Nigeria”, *World academic journal of management*, Vol 11, Issue 3, pp. 29-34, 2023
24. M.S Stephens, “Structure of Air Transport In Nigeria”, *PEC*, pp. 12-34, 2009