

CHARACTERISTICS OF AIR TRAVELLERS AND TRAVEL PROCESSES AT MALLAM AMINU KANO INTERNATIONAL AIRPORT, KANO

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Abstract

A study on passenger behaviour was carried out at the Mallam Aminu Kano International Airport (MAKIA) in order to offer meaningful suggestions vital for airport management. Primary data were obtained through questionnaire administration and observations and analysed using the contingency tables. High-ranking civil servants and other respondents with monthly incomes of more than ₦50,000 constituted 66%. Age wise, 26-40 age group accounted for 50% of the respondents. On the average, about 88% of the passengers at MAKIA engaged in discussions, watching TV or reading newspapers and magazines in the lounge. It was found that the airport handled 4042 and 1971 domestic and international passengers respectively, comprising 2703 in bound, 2727 out bound and 583 transit passengers from a total of 58 landings and 65 take off operations during the 15 day-study period. It is envisaged that the findings in this research will assist both the airline carriers and the airport management in effective planning and management.

1. Introduction

Transportation system in a developing nation such as Nigeria is one of the most essential assets for its future development. Today, more people can afford the cost of air travel as compared to the era of austerity measures and Structural Adjustment Programme (SAP) of the early 1980s. At the beginning of SAP era, the aviation industry in Nigeria did not face serious depletion in the number of aircrafts and patronage until 1994, following the hikes in fares as a result of the upward review in the price of aviation fuel (CBN, 1994).

Aviation industry analysts predicted that world wide airline travel will increase by 5% annually through the year 2000 (Green, 1990). As such, airports will be further pressed to accommodate the increasing demand for flights and passenger-handling services. The airport is a large and complex subsystem within a large system (the community and the world), It is the point of interaction of the three major components of the air transportation system, namely airport, user and airline.

Mallam Aminu Kano International Airport (MAKIA) is situated on latitude 12° 2' north and longitude 08°31' east (FAAN, 1998). According to Sabo (1992), MAKIA has two runways of 2.6 and 3.3 kilometres with eleven apron parking bays at a time, accounting for an average of 259,605 domestic and 123,692 international air passengers annually. MAKIA generates about 60,000 U.S dollars annually as the principal airport for Hajj traffic in Nigeria (Kundiri, 2000). In a related study by Kundiri and Adebisi (2002), it was observed that the menace of capacity constraint would affect the size of the lounge if adequate provision is not urgently made. Roberts (1979) suggested that provision of adequate comfort will ease passenger weariness due to long dwelling times in departure lounges. Lipman (1988) found out that the performance and efficiency of a terminal are measured by the flow of the embarkation and debarkation operations.

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For the purpose of planning and management in airport systems and indeed handling processes, the information on passenger characteristics will assist both the airline carriers and the airport management in terms of provision of some basic infrastructural needs, thus enhancing the level of comfort and processing efficiency.

2. Materials and methods

The data used for this research were collected in May, 1998 at the Mallam Aminu Kano International Airport Kano, using questionnaire, field observations and past documents of the Federal Airports Authority of Nigeria (F.A.A.N). The month of May corresponds to the peak period of air travel due to the summer recreation and schools vacation. A total of 480 questionnaires were administered to passengers at random and only 123 questionnaires were retrieved back. This number is adequate as the sample size is greater than 1 in 20 in traditional surveys of this nature (Ortuzar and Willumsen, 1990). The data collected were stratified in tabular forms and analysed using contingency tables.

The designed questionnaires sought information on types of flight, time of arrival or departure, service route, origin and destination. Also asked in the questionnaire were respondents' gender, age, income, educational level, occupational status, trip purpose, mode of ground access to and from the airport, time spent at the airport waiting area, and number of times of previous air travels. The 15-day field survey, which lasted between 1-3 hours daily, revealed some of the behavioural pattern of the passengers during waiting.

3. Results and discussion

During the 15-day survey, the 793.25 m² terminal area at MAKIA handled 1971 and 4042 international and domestic passengers respectively from a total of 58 landing and 65 take off operations. The usefulness of most of these salient characteristics of the air travellers cannot be over emphasized especially in planning for the infrastructural needs and the day-to-day management of the passenger handling processes. Table 1 shows the detail of the flights and service operations.

Table 1: Detail of flights and service operations used for the research

Flight route	Flight Number	Number of Passengers	Landing operations	Take-off operations	Flight Schedule
KAN-AMS	KL586	835	4	4	Sundays & Thursdays
KAN-CAI	MS858	409	6	5	Mondays
KAN-DBX	WT984	20	-	1	Sundays
KAN-KRT	SD229	151	2	2	Sundays
JED-KAN	WT983	556	5	4	*
KAN-LOS/KAN-MIU	QN611/661	2817	30	33	Wednesdays, Thursdays & Saturdays
KAN-LOS/KAN-MIU KAN-ABJ	EAN240/241	933	9	13	Sundays, Mondays & Wednesdays
KAN-LOS/KAN-KAD	WT318/359	292	2	3	Sundays & Wednesdays

*Non-scheduled flight

3.1 Passenger engagements before flight take-offs

Table 2 below shows the engagements of passengers as they await their flights in the airport.

Table 2: Average daily observation of passenger engagements at the airport

Chatting	Watching TV	Reading	Idling
18	32	40	11

Form the table; it can be observed that only 12% of the passengers were not doing anything in particular during waiting time. The rest were engaged in chatting, watching TV or reading. Both inbound and outbound international passengers undergo routine checks by security, custom and drug law enforcement agencies. The passengers on the local flights are normally exempted from some of these checks.

3.2 Traffic flow characteristics

The flow pattern of passengers observed in MAKIA is a function of layout of the terminal building, processing components, pattern of passenger demand and the number of airlines using the airport (Dunlay and Park, 1978). Between 1992 and 1997, MAKIA recorded an average annual traffic of 383, 297 passengers, out of which 32% were international and the rest local passengers. The annual inbound and outbound international passengers accounted for 57% and 43% (70,221 and 53,471) respectively. The annual passenger traffic could be a viable design tool for the determination of the standard busy rate (SBR)/annual ratio, as could be seen in Table 3.

Table 3: Annual inbound and outbound international passenger traffic at MAKIA

Year	Passenger Traffic*			SBR/annual ratio
	Inbound	Outbound	Total	
1992	80079	59682	139761	0.0026
1993	84893	77000	161893	0.0022
1994	61207	62768	123975	0.0029
1995	67494	36023	103517	0.0036
1996	42309	40650	82959	0.0046
1997	85342	44704	130046	0.0028

*Source: FAAN (1998)

The SBR/annual ratio increased with decrease in the total passenger traffic. The highest and lowest passenger traffics of 161893 and 82959 were recorded in 1993 and 1996 respectively. It is likely that the strength of the naira in 1992 through 1994 and its subsequent devaluation between 1995 and 1997 were responsible for these variations (CBN, 1994). Passenger trip between areas is a function of population, per capita income, airfare and community-of-interest measure (Moore and Soliman, 1981).

3.3 Passenger characteristics at MAKIA

The results obtained from the response of the administered questionnaires show that 65% of the passengers were males and the rest were females. Half of the passengers observed fall within the 26-40 year age group, while the 41-60 year age group constituted 45% and the 16-25 year age group constituted only 5%. The result also revealed that 46 and 43% of the respondents were business men and top civil servants with monthly income of above N50,000. This result implies that air travel in Nigeria is expensive and is mostly patronized by high income earners.

CONCLUSION

The Mallam Aminu Kano International Airport handled 4042 and 1971 domestic and international passengers respectively, comprising 2703 in bound, 2727 out bound and 583 transit passengers from a total of 58 landing and 65 take off operations during the study period. The outbound passengers undergo a number of formalities in the terminal building prior to their flight embarkation announcements. These formalities include immigration and custom checks and screening by security and drug control agencies. The inbound passengers undergo similar checks as well. About 88% of the passengers at MAKIA engage in discussions, watching TV or reading in the lounge, while they await their flight to take-offs. The result of this study also revealed that 46 and 43% of the respondents were business men and top civil servants with monthly income of above N50, 000. This implies that air travel in Nigeria is mostly patronized by high income earners.

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