



ASSESSMENT OF AIRPORT SERVICE QUALITY AT MALLAM AMINU KANO INTERNATIONAL AIRPORT (MAKIA) KANO

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Abstract: Airports are a hub for aviation activities which support Airlines operations. Airport service quality measurement is required to promote satisfaction level among Air travelers by continuously improving the defected services. The study purpose is to assess Airports service quality at Mallam Aminu Kano International Airport (MAKIA) in Kano. Using purposive sampling, MAKIA was picked out of 31 Airports in Nigeria. Cochran formulae was used to determine a total of 384 questionnaires which were administered to air travellers boarding and onboarding passengers at the terminal building. The Airport service quality measurement scale was adapted from SERVPERF model with 22 service attributes believed that air travellers attached more importance to. The study outcome showed that the average Airport service quality score was 2.701. In addition, the results revealed that there exists a statistically significant relationship between service quality and air traveler satisfaction on; reliable and updated electronic information system (P-value=0.004), Airport safety and security services (P-value= 0.000), Prompt service from airline operation (P-value= 0.001) and Provision of assistance to minor (P-value = 0.002). This study therefore concludes that Mallam Aminu Kano International Airport offered a bad service to air travellers. The study recommends among others that, Airport staff courtesy should be improved through subjecting their staff to behavioural management training by the top management. service quality is an area which both Airport management and airlines can increase their revenue through increasing patronages. Therefore, a decisive measure by the Airport authority to improve the service offered will increase the service quality rating at Mallam Aminu Kano International Airport.

Keywords: Passengers. Service Quality, Airport, satisfaction and MAKIA

INTRODUCTION

The 21st century has witness massive growth in the aviation sector. This growth was necessitated by the development in the Aero plane's technology and Mail cargoes. This resulted to significant increase in passenger traffic handled by the Airports throughout the world. According to U.S. Energy Information Agency (EIA, 2019), forecasts that passenger air travel revenue would rise from 6 trillion seat miles in 2018 to over 18 trillion seat miles in 2050 globally. However, it is anticipated that in 2050, air travel would generate \$330 billion of income. The growth in the aviation sector in Africa as a whole is quite slow compare to the rest of the world particularly Asia and Europe (IATA, 2021; EIA, 2019). According to recent data from the National Bureau of Statistics (NBS,

2019), 8.634 million passengers were handled by Nigerian Airports in 2018. The expansion of the aviation industry is essential for the country's economic prosperity and for attracting both domestic and foreign investment (Chikwendu, et. al., 2012). Airports exist as a centre for traffic collection, and offer point to point services to aircraft operations. The effectiveness of airline operations is as a result of the presence of Airport. Because of the vital role played by the Airports, Airport service quality measurement is important to ensure that wonderful services are offered to the air travellers by determining the aspect of the services air travellers attached more importance to (Airport Council International, 2018).

Airport service quality, as described by Gronroos (1984), is the perceived assessment that users of Airport services make of the services they have used, it is determined by a comparing Air travellers service expectations and the services they have actually experienced. Quality is a crucial component of the service sector, and it has been acknowledged as essential to any organization's survival in the face of competition, as well as to win over the public's acceptance and fulfil its objective (Natalisa & Subroto, 2003). According to Aleksandra (2017), service quality enhancement by businesses is a technique for securing a leading position in a particular industry and differentiating their services from those of competing businesses offering comparable service products.

There are so many factors contributing to airport service dissatisfaction in Nigeria, specifically at Mallam Aminu Kano International Airport (MAKIA), this includes accessibility, the boarding process, longer queues at baggage claim areas, the cleanliness of check-in areas, the check-in process, information on flight status, and other service-related factors (Oghojafor & Adebola, 2014; Sung & Jin, 2014; Al Refaie *et al.*, 2014; Nwaogbe *et al.*, 2021). However, effort by government through Nigeria Civil Aviation Authority and international organizations (i.e., International Civil Aviation Organization, Airport Council international) to improve service quality and ensure quality services are delivered to air travellers has yet yield the required results as service quality ratings in Nigeria airports are still poor (Ugo & Ejem, 2020). There is still potential for enhancement of airport service quality particularly in the areas of the aesthetics of airport environments, catering services, costs associated with computerised check-in, the provision of assistance to minors, prompt service from airline operators, and early flight delay notification. which is what this study is here to do. This study adopts ServPerf model to determine the overall service quality at MAKIA. Also, to show the relationship between customers' impressions of service and the quality of that service offered at Mallam Aminu Kano International Airport. The study put out one null hypothesis, which was stated as follows; there is no statistically significant connection between the quality of Airport services and consumer satisfaction with four important Airport services attributes.

LITERATURE REVIEW

Service Quality Versus Service Satisfaction The best way to assess the quality of a service is to contrast expectations with perceptions of how it was provided (Chao *et al.*, 2013; Ohida, 2023). As a result, an airport is thought to provide excellent services when the perceived services exceed the expectations of the passengers, and the opposite is also true. Yet, if the perceived services are the same as what is expected, it means that airport users are indifferent about the level of customer service provided at the airport. According to Zahari *et al.* (2008) and Hung *et al.* (2003) research, both the public and private sectors of the economy face significant challenges in providing high-quality services. Because customers base future purchases on the quality of their current experience, it is critical to consider how it may affect customers' future purchase intentions (Oluwole et. al., 2020). The terms "service satisfaction" and "service quality" have been used by researchers interchangeably for many years, and it is generally acknowledged that customers' opinions of a particular service are influenced by their level of satisfaction (Ojekunle *et al.*, 2022; de Oa & deOa, 2015; Eboli & Mazulla, 2011). According to Zeithaml & Bitner (2000), service satisfaction is influenced by quality. So, a person's level of satisfaction or dissatisfaction might be determined by how well they felt the service met their expectations (Kotler & Keller, 2009). Agnes

(2002) posited that evaluating the quality of a service will assist Airport customers develop a perception of Airports as service providers. Customer satisfaction is not always apparent, and the degree of satisfaction is determined by how well the service matches the customer's expectations. In the service sector, especially the aviation industry, studies to determine the relationship between service quality and service satisfaction have been ongoing for some time. Nonetheless, numerous research has supported the connection between customer satisfaction and service quality (Sureshchandar *et al.*, 2002; Liu *et al.*, 2016; Ugo & Ejem, 2018).

Empirical Review

Many literatures on service quality and customer satisfaction have been written over the years in Europe, Asia, North America, and Africa, particularly Nigeria. Studies have attempted to draw a connection between perceived and anticipated levels of service. At Indonesia's Ahmad Yani International Airport, Rasyida *et al.* (2016) used Servperf model and key performance analysis to quantify service quality (AYIA). The goal of the study was to ascertain the level of service provided by the Airport and the factors that customers found most important in a satisfactory experience. The study's findings show that the Airport had an average service quality score of 3.088. This suggests that the AYIA may not be entirely capable of giving its customers the "best" service.

Before the Covid-19 pandemic in Europe, Gajewicz *et al.* (2022) researched the standards of quality assessment of regional Airport services. The goal of their study was to identify and evaluate the quality standards that travellers used to evaluate Airport services. The study's findings show that 11 factors were identified as important and categorised into three groups: pricing, security, information, and disability, and passenger service. The study comes to the conclusion that these factors should be taken into account when managing the airport and identifying the causes of poor-quality services to improve them and eliminate or at least reduce passenger dissatisfaction, especially in light of the reopening of airport operations after the COVID-19 pandemic and increasing the attractiveness of airport services. In another study, Jiang and Zhang (2016) utilize Servqual model to evaluate the quality of service in Melbourne Airport's. The study's findings demonstrated that the overall service quality of the provided service was poor. Airport management needs to take immediate action in order to address the issues raised by the writers about Airport parking, immigration, internet and Wi-Fi access, and luggage delivery. Moeun and Vicheththikanitha (2022) investigated the effects of airport service quality, customer satisfaction, and image on travel behaviour. The relationship between service quality, satisfaction, image, and behavioural intention was measured by the researchers using confirmatory factor analysis and structural equation modelling. The findings demonstrate that contentment has a significant impact on behavioural intention to travel to the target country, but air service quality has a moderate impact and airport image has no impact.

The Honolulu International Airport Passengers' Opinions of Airport Service Quality were subjected to content analysis by Bae and Junwook (2022). The researchers' purpose was to identify the features that affect passengers' experiences at Honolulu

International Airport and other top Airports across the world (i.e., Singapore Changi Airport, Haneda Airport, Incheon International Airport, Hamad International Airport, and Hong Kong International Airport), including satisfiers, dissatisfiers, and performance factors. The findings indicate that Honolulu International Airport needs to increase facility cleanliness, signage legibility, and personnel civility. The most often used words by unhappy passengers are security, check, flight, queue, and personnel, according to a context-specific analysis. The most frequently used adjectives when describing a positive Airport experience are staff, terminal, clean, time, immigration, and free.

In three regional airports in Thailand, Kratudnak and Tippayawong (2018) looked into important elements for Airport service quality. Three regional Airports run by AOT (Airports of Thailand) in various parts of Thailand, namely Chiang Mai (CNX), Don Mueang (DMK), and Phuket, were the subjects of the study. The goal was to

categorise the service quality characteristics utilised in the service evaluation of those Airports (HKT). The study results showed that 18 service-related variables were divided into three categories: check-in (attribute 1), security (attribute 2), convenience (attribute 3), Airport facilities (attributes 4), and mobility (attribute 5). However, convenience attributes were ranked most essential features and the check-in attributes were the least important among the attributes. The study offers aviation authorities and airport managers the critical elements of service quality to improve service levels in their own airports.

In USA, Fodness and Murray (2007) conducted a study on travellers' expectations for the quality of Airport services. By conducting an empirical examination of customers' expectations for the service sector, their study aims to contribute to the development of a conceptual model of airport service quality. According to the study's findings, passengers' expectations of the quality of airport services are a multifaceted, hierarchical construct that encompasses three essential dimensions: function, interaction, and distraction. When Allen et al. (2020) used a SEM technique to evaluate airport service quality, they discovered that physical dimension (such as terminal cleanliness) and control (such as security) elements have the greatest impact on customers' overall satisfaction. Bellizzi *et al.* (2018) used in-person interviews to gauge how satisfied passengers were with the Lamezia Terme Airport's level of service and found that different traveller backgrounds have different satisfaction variables and levels. Also, a survey method was used by Paramonovs and Ijevleva (2015) to examine key aspects of traveller satisfaction at Latvia's Riga International Airport. The findings showed that communications, clear signage, clean restrooms, staff courtesy, and availability are important elements influencing the pleasure of flying passengers.

In Nigeria, Adeniran and Fadare (2018) used the Servqual model to analyse customer satisfaction and service quality at Murtala Muhammed Airport (MMA2) in Lagos. The findings revealed that the reliability service quality attribute contained the most important Airport services (i.e., Efficiency of available public transport options, Taxi availability and prices, Baggage delivery times, Security and safety standards, and so on). Additionally, the airport received lower ratings for its taxi availability (SQ= 0.1228), baggage delivery times (SQ= -0.0702), choice of shops, tax-free and otherwise (SQ= -

0.0176), ease of transit through the Airport (SQ= 0.0702), and standard of facilities for the physically disabled (SQ=-0.3948). Using Murtala Muhammed International Airport (MMA1) in Lagos and Nnamdi Azikiwe International Airport in Abuja, Ugo and Ejem (2020) investigated the quality of Airport services in Nigeria. The authors used the SERVQUAL model to assess the quality of the Airport service, which was then compared. The study's findings show that both Airports' SQ is poor and falls short of what both airlines and passengers expect in terms of service quality. Arnoldina and Viktorija (2013) conducted a study to assess the quality of airport services in Greece while taking into account the challenges of raising the standard of airport services offered to airlines and taking into account shifting consumer needs. The SERVQUAL approach and other ways of measuring Airport service quality from the views of airline operators as consumers of Airport services were compared in the study using primary data from the airline's perspective of Airport service quality. Based on its findings, the study suggested a set of criteria for evaluating the standard of Airport services offered to airlines.

Theoretical Framework

Servperf model

The Service Performance model is also known as SERVPERF model. It is a framework for evaluating the quality of services. This model was introduced by Cronin and Taylor (1992), it was predicated on the idea that a customer's past experiences have an impact on their current attitude towards a purchase. The Servperf model now utilize service perception without considering service expectation as was used by Parasuraman *et al.* (1988). The Servperf model is similar to the Servqual in term of service dimensions. It has 22-sub-attributes which was categorized into five service dimensions (i.e., Reliability, Tangibility, Assurance, Empathy and Responsiveness).

According to researchers like Babakus and Boller (1992), Brady *et al.* (2002) and Dabholkar *et al.* (2000) posited that ServPerf model when compared with the SERVQUAL scale, the SERVPERF metric has surpassed the SERVQUAL scale. The ServPerf model can assist organizations to pinpoint their strength and opportunities for development. Mathematically, ServPerf model as proposed by Cronin and Taylor (1992) are stated in the equation (1) below.

$$ASQ = \sum W_j P_{ij} \dots \dots \dots \text{EQN (1)}$$

Where, ASQ is the Airport service quality, W_{ij} is the weighted factor for service attributes statement j to an Air traveller “ i ”, K is the number of service attributes and P_{ij} is the perceived satisfaction of an Air traveller I with respect to the performance of the service features (i.e., service performance). However, the weighted (W_{ij}) factor was determined using the equation 2 (Rasyida *et al.*, 2016).

$$W_{ij} = \frac{I_{ij} - \text{Min}}{\text{Max} - \text{Min}} \dots \dots \dots \text{EQN (2)}$$

The I is the mean importance score of each of the items in the questionnaires, the Min is the minimum score in the questionnaire (i.e., 1) while Max is the maximum score in the questionnaire (i.e., 5).

The foregoing study adapts Servperf model to determine the service quality offered at Mallam Aminu Kano international Airport (MAKIA). Twenty-two service attributes were evaluated on the basis of the five service dimensions as specified by Cronin and Taylor (1992). However, the theoretical

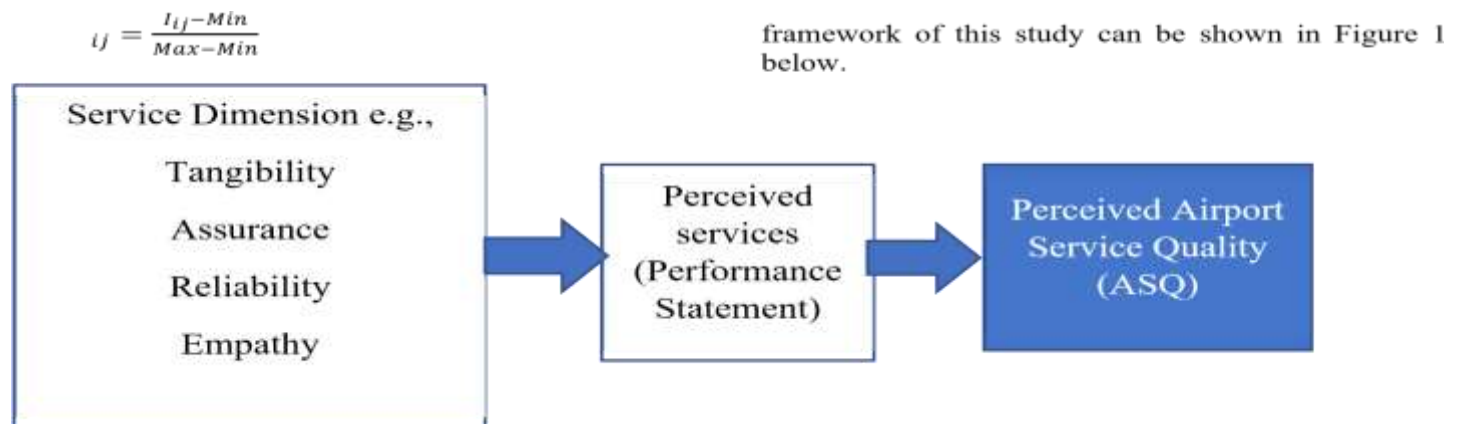


Figure 1: Theoretical Framework

Sources: Adapted from Cronin and Taylor (1992)

From the Figure 1 above, the present study perceived Airport service quality as a function of performance statement, and Service Dimension. This service attributes are

1. **Tangibility:** As indicated by the philosopher Mathur (2017), Tangibility is the property that a phenomenon shows if it has movement mass or energy or momentum. The tangibility attributes consist of Aesthetics of Airport Environment, wonderful Toilet service, comfort of the seats at the waiting area, clean Airport waiting Area and Appealing look of the Airport stops and restaurants.
2. **Assurance:** i.e., sureness, implies a perspective or a way marked by simple coolness and opportunity from vulnerability, shyness, or shame (Adeniran & Fadare, 2018). Information on Airport safety and security service, early notification of flight delay, charges for computerized check in and Prompt service from airline operators are the service attributes evaluated under the assurance dimensions.
3. **Empathy** is the ability of Airport management to comprehend or feel what someone else is encountering from inside their edge of reference, that is, the ability to put oneself in another's position (Bellet *et al.*, 1991). Empathy attributes used for the study comprises of airport staff courtesy, luggage/baggage handling service,

airport service meets customers requirement and minimum waiting time for loading and unloading of baggage/luggage

4. Responsiveness: for example, an organization's ability to help its customers by offering quick and efficient service performance. Desk officer ability to answer question about flight, willingness of the Airport staff to provide assistance to customer, provision of assistance to minors and availability of efficient Airport taxi service are service attributes studied under responsive dimension.

5. Reliability: The quality of being dependable or of performing reliably well (Ohida, 2023). The service attributes evaluated under the reliability dimensions are Reliable and updated electronic information system, Compliant handling process, guaranteed reservation when there are flight problems, Reliability of flight schedules and wonderful gate service.

RESEARCH METHODOLOGY

Target Population and Sampling Method

This study used purposive sampling to pick Mallam Aminu Kano International Airport (MAKIA) out of thirty (31) Airport in Nigeria (FAAN, 2016). The study population consist of Air travellers using MAKIA Airport for both inbound and outbound flights. Twenty-two Airport service attributes were evaluated in line with servperf model. According to NBS (2018) there were total 463,650 passenger traffic handle by MAKIA in 2018, with a growth rate of

9.1%, it was forecasted that MAKIA would handle about 2,223,493 pax in 2023 using EQN 3. (Oluwole, 2020). In lieu of this, Cochran (1934) formulae were adopted by this study (see EQN (4)) to determine 384 questionnaires which was administered to the Air travellers boarding and onboarding passengers at the terminal building.

$$P = P_0 (1 + r)^n \quad \text{..... EQN (3)}$$

Where P = is the anticipated passenger volume handled, P_0 = initial passenger volume (463,650), r = Air travellers passenger changes in %, and n = prediction year (i.e., 17 years).

$Z = \frac{PQ}{e}$

$$N = \frac{Z^2 PQ}{e} \quad \text{..... EQN (4)}$$

Where, N is the minimum required sample size, $Z = 3.8416$ (chi square value for one degree of freedom at 5% significance level), P (i.e., is the (estimated) proportion of the population which has the attribute in question) = 0.50, $Q = 1 - P$ (maximum assume sample size), and $e = 0.05$ (desired level of precision).

Method of Data Collection and Analysis

The study's questionnaire was broken down into three sections: the first section collected information on the sociodemographic characteristics of air travellers; the second section collected data on important statement (Anticipated) of service attributes; and the third section collected data on performance statements (i.e., service satisfaction). Nonetheless, a 5-point Likert scale was used to score passengers' perceptions, with 1 denoting dissatisfaction and 5 denoting greater satisfaction. In contrast, 1 denotes a statement that is not important and 5 denotes more important. The gathered data was examined using frequency, percentages, and mean index scores. Regression analysis was used to determine the connections between service quality and air travellers' satisfaction of four key dimensions (i.e., reliable and updated electronic information system, Airport safety and security services, Prompt service from airlines operators, and Provision of assistance to minor) service quality in MAKIA. However, it is important to note that any service quality or satisfaction score less than 3.00 indicates that the service is a defective service.

Overview of MAKIA

Mallam Aminu Kano International Airport is

Nigeria's oldest Airport, with operations beginning in 1936. The first aircraft to land in Nigeria arrived at Kano in 1922. It is situated at 12°02'55' north latitude and 8°31'20' east longitude. Kano's commercial activity may be traced back to precolonial periods. Textile materials, leather, and other leather goods are among Kano's export North Africa. When a railway line reached Kano in 1911, it became connected to trans-Atlantic trade. Kano is a significant hub for the production and export of agricultural goods like as hides and skins, peanuts, and cotton, and the Kano economy is based on commerce, retail, and service due to power shortages. As a result, compared to Abuja and Lagos, the volume of traffic held by this airport is minimal. This is because the majority of the traffic drawn to Kano is involved in small commerce and travels mostly by vehicle.

RESULTS AND DISCUSSION

Socioeconomic Features of the Respondents Table 1 shows the socioeconomic features of the air travellers at Mallam Aminu Kano International Airport. From the Table 1, only 46.1% of passengers flying by air were female, while 53.9% were men. This result supports Oluwole et al. (2020)'s claim that more men than women fly in Nigerian public aviation. Table 1 shows the outcome of the analysis of the marital status of the air travellers, the result shows that only 8.6% of air travellers are divorced, while 41.2% of them are married and 50.2% of them are still single. This result is not unexpected given that research has shown that married people travel less and spend less than unmarried persons due to social and family obligations (Lee & Bhargava, 2004). The table shows that 43.1% of air travellers were between the ages of 21 and 31, 26.2% were between the ages of 32 and 42 years, and 16.9% were between the ages of 43 and 53 years. In addition, only 6.1% of those who travelled by air were over the age of 54 years and 7.7% were under the age of 20. The data shows that younger people travel by air in greater numbers than older people. This result supports Spence's (2002) claim that being younger enhanced a person's likelihood of engaging in a particular activity. For instance, compared to older air travellers, youngsters fly more frequently. Similarly, the analysis of the educational background of the air traveller in Table 1 reveal that 40.6% of air travellers have bachelor's degrees, 21.9% have polytechnic certificate, and 16.6% have postgraduate degrees. In addition to the result the Table 1, shows that only 4.6% of air travellers had a primary school cert. whereas approximately 8.9% of them possessed a National Certificate of Education. The analysis of the air traveller's monthly income level in table 1 reveals that 51.3% of them earn over ₦201,000 monthly, 18.2% of them earn between ₦151,000-200,000 monthly and 15.4% of them earn between ₦101,000 and ₦150,000 monthly. Similar to this, the Table 1 recorded that 12.6% of the air travellers earn between ₦51,000-100,000 monthly and only 2.5% of them earn less than ₦50,000 monthly.

In a related development though not shown in the table, it reveals that 35.7% of the air travellers' occupations is business, 23.6% of them are privately employed, 22.2% of them are civil servant and 18.5% of them are still students. Again, the analysis showed that larger proportion of the air travellers flight purpose is for business, 23.1% of flight purposes are for professional advice, and 7.4% of the flight purpose at the Airport is for leisure. Corresponding to this, the analysis recorded in table 1 indicate that 5.2% of flight purposes are for political reasons, 4.9% of the flight purposes are for school reasons and only 3.7% flight purposes are for work reasons. This outcome is in line with the work of Ohida (2023), Ohida and Ojekunle (2021) who concluded that majority of flight purpose flights account for 59.4% of air travel in Nigeria while international flights account for 40.6% of flight in Nigeria.

Service Quality

Table 2 shows that the average service satisfaction score for the dimension is 3.202. comparing it with the MIS score of service satisfaction reveals that Air travellers were satisfied with the overall services offered by the Airport. Air travellers were more satisfied on the reliable and updated electronic information system (M= 4.146),

provision of assistance to minors (M= 4.300) and Airport safety and security service (M= 4.493). The Nigeria civil aviation without doubt offer excellent services to passenger particularly in the area of safety and security. This is not surprising because safety is global priority in the aviation sector (FAA, 2022). In fact, analysis on air travellers' satisfaction on Airport safety and security is in line with the work of Adeniran and Fadare (2018). Similarly, the average score of the service quality stand at 2.701, comparing it with the MIS score it reveals that the Airport offered poor service quality. This outcome supports the studies conducted by Ugo and Ejem (2020), Adeniran and Fadare (2018), Rasyida *et al.* (2016) and Jiang and Zhang (2016) that Airport offered a defective service.

Table 2: Service quality measurement

Service attribute	Mean importance statement	Weighted factor (Wij)	Performance statement (Pij)	Service quality (SQ)
TANGIBILITY				
Aesthetics of airport environment	3.538	0.635	3.626	2.300
Wonderful toilet service	4.172	0.793	3.231	2.562
Comfort of the seats at the waiting area	3.996	0.749	3.678	2.755
Clean Airport waiting area	4.339	0.835	3.509	2.930
Appealing look of the airport stops and restaurants	2.839	0.959	2.930	2.809
RELIABILITY				
Reliable and updated electronic information	4.317	0.829	4.146	3.337
Compliant handling process	4.831	0.958	2.543	2.436
Guaranteed reservation when there is flight problems	4.911	0.978	1.875	1.834
Reliability of flight schedule	4.825	0.956	2.000	1.913
Wonderful catering service	4.000	0.750	3.416	2.562
ASSURANCE				
Airport safety and security service	4.673	0.924	4.493	4.152
Early notification of flight delay	4.655	0.914	2.789	2.543
Charges for computerized check-in	4.387	0.847	3.044	2.578
Prompt service from airline operators	4.873	0.968	3.215	3.112
RESPONSIVENESS				
Desk officer ability to answer question about flight	4.479	0.869	3.221	2.799
Willingness of the airport staff to provide assistance to customers	4.535	0.869	3.137	2.773

Provision of assistance to minor	4.663	0.916	4.300	3.939
Availability of efficient airport taxi services	4.198	0.799	3.341	2.669

EMPATHY

Airport staff courtesy	4.360	0.840	2.234	1.877
Luggage/baggage handling services	4.730	0.933	2.190	2.043
Airport service meeting customers requirement	4.024	0.756	3.100	2.351
Minimum waiting time for loading and unloading of luggage	4.206	0.803	2.950	2.369
Average score	4.177	0.849	3.202	2.701

Test of Hypothesis

H₀₁ there is no statistically significant relationship between service quality and customers satisfaction on four key services attributes (i.e., Reliable and updated electronic information system, airport safety and security services, prompt service from airline operation and provision of assistance to minor). From the analysis in Table 3, it reveals that reliable and updated electronic information system (Pvalue=0.004), Airport safety and security services (Pvalue= 0.000), prompt service from airline operation (P-value= 0.001) and provision of assistance to minor (P-value = 0.002) are less than the significant level of 0.05. this implies that there exists a statistically significant connection between service quality and satisfaction on the four key services attributes above. This outcome is in tandem with the work of Adeniran and Fadare (2018), Sureshchandar *et al.* (2002) and Liu *et al.* (2016).

CONCLUSION AND RECOMMENDATIONS

This study assessed airport service quality at Mallam Aminu Kano International Airport (MAKIA). The study concluded that the overall service quality at MAKIA is a bad service. However, Reliable and updated electronic information system, airport safety and security services, prompt service from airline operation and provision of assistance to minor have high service quality rating. It is therefore, recommended that

1. The management should closely monitor the Airport Maintenance and handling company in charge of providing cleaning services to ensure that toilets and waiting areas are properly kept.
2. Airport management should ensure that the luggage/baggage handling services be improved upon.
3. Airport staff courtesy should be improved through subjecting their staff to behavioural management training by the top management.

REFERENCES

- Adeniran, A. O., & Fadare, S. O. (2018). Assessment of passengers' satisfaction and service quality in Murtala Muhammed Airport (MMA2), Lagos, Nigeria: Application of SERVQUAL model. *Journal of Hotel Business Management*, 7(2), 1-7. <https://doi.org/10.4172/2169-0286.1000188>
- Airport Council International (ACI). (2018). The quality journey of an ASQ survey. Retrieved from <https://blog.aci.aero/the-quality-journey-ofan-asq-survey/>
- Allen, J., Bellizzi, M. G., Eboli, L., & Gabriel, C. F. (2020). Service quality in mid-size air terminal: SEM-MIMIC ordinal orbit accounting for travel, socio-demographics, and user type heterogeneity. *Journal of Air Transport Management*, 13(3), 1-11.

- Arnoldina, P., & Viktorija, A. (2013). Evaluation of the airport service quality. *Procedia - Social and Behavioral Sciences*, 1(10), 398–409.
- Al-Rafaie, A., Bata, N. E., & Issam, J. (2014). Examining factors that affect passengers' overall satisfaction and loyalty: Evidence from Jordan Airport. *Jordan Journal of Mechanic Industry Engineering*, 8, 94-101.
- Aleksandra, G. (2017). Models and methods of measuring the quality of logistic service. *Procedia Engineering*, 18(2), 255–264.
- Babakus, E., & Boller, G. W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research*, 24(3), 253-268.
- Bae, W., & Junwook, C. (2022). Content analysis of passengers' perceptions of airport service quality: The case of Honolulu International Airport. *Journal of Risk and Financial Management*, 15(5), 1-19. <https://doi.org/10.3390/jrfm15010005>
- Bellet, P. S., & Michael, J. M. (1991). The importance of empathy as an interviewing skill in medicine. *Journal of the American Medical Association*, 266(13), 1831–1832. <https://doi.org/10.1001/jama.1991.03470130111039>
- Bellizzi, M. G., Eboli, L., Carmen, F., & Gabriella, M. (2018). Air transport passengers' satisfaction: An ordered logit model. *Transportation Research Procedia*, 33, 147–154.
- Brady, M. K., Cronin, J. J., & Brand, R. R. (2002). Performance-only measurement of service quality: A replication and extension. *Journal of Business Research*, 55(1), 17-31.
- Chao, C. C., Lin, H. C., & Chen, C. Y. (2013). Enhancing airport service quality: A case study of Kaohsiung International Airport. *Journal of the Eastern Asia Society for Transportation Studies*, 10, 2235–2254. <https://doi.org/10.11175/EASTS.10.2235>
- Chikwendu, D. U., Ejem, E., & Ezenwa, A. (2012). Evaluation of service quality of Nigerian airline using SERVQUAL model. *Journal of Hospitality Management and Tourism*, 3(6), 117-125. <https://doi.org/10.5897/JHMT12.019>
- Cochran, W. G. (1934). The distribution of quadratic forms in a normal system, with applications to the analysis of covariance. *Mathematical Proceedings of the Cambridge Philosophical Society*, 30(2), 178–191. <https://doi.org/10.1017/S0305004100016595>
- Cronin Jr, J. J., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *The Journal of Marketing*, 58(1), 125-131.
- De Oña, J., & de Oña, R. (2015). Quality of service in public transport based on customer satisfaction surveys: Are view and assessment of methodological approaches. *Transportation Science*, 49(3), 605–622.

- Dabholkar, P. A., Shepherd, C. D., & Thorpe, D. I. (2000). A comprehensive framework for service quality: An investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing*, 76(2), 139-173.
- Eboli, L., & Mazzulla, G. (2008). A stated preference experiment for measuring service quality in public transport. *Transportation Planning and Technology*, 31(5), 509-525.
- Fodness, D., & Murray, B. (2007). Passengers' expectations of airport service quality. *Journal of Services Marketing*, 21(7), 492–506. <https://doi.org/10.1108/08876040710824852>
- Gajewicz, L., Walaszczyk, E., Nadolny, M., & Nowosielski, K. (2022). Criteria of quality assessment of regional airport services: A very last picture before the COVID-19 pandemic. *Journal of Air Transport Management*, 103, 1-10. <https://doi.org/10.1016/j.jairtraman.2022.102231>
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Hung, Y. H., Huang, M. L., & Chen, K. S. (2003). Service quality evaluation by service quality performance matrix. *Total Quality Management & Business Excellence*, 14(1), 79-89.
- International Air Transport Association. (2021). Economic performance of the airline industry. Retrieved from <https://www.iata.org/en/iataarepository/publications/economic-reports/airline-industry-economic-performance---october-2021---report/>
- Jiang, H., & Zhang, H. (2016). An assessment of passenger experience at Melbourne Airport. *Journal of Air Transport Management*, 54, 88-92. <https://doi.org/10.1016/j.jairtraman.2016.04.002>
- Kotler, P. L., & Keller, K. L. (2009). *Marketing management* (13th ed.). Pearson Education/Prentice Hall.
- Kratudnak, S., & Tipayawong, K. Y. (2018). Analysis of key factors for airport service quality: A case study of three regional airports in Thailand. *Proceedings of the International Conference on Industrial Engineering and Operations Management Bandung, Indonesia*, 6(8), 1773-1782.
- Lee, Y., & Bhargava, V. (2004). Leisure time: Do married and single individuals spend it differently? *Family and Consumer Sciences Research Journal*, 32, 254-274.
- Liu, W. K., Lee, Y. S., & Hung, L. M. (2016). The interrelationships among service quality, customer satisfaction, and customer loyalty: Examination of the fast-food industry. *Journal of Foodservice Business Research*, 20(2), 146-162.