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The role of quality in airport services in passenger satisfaction at Aden Adde International Airport, Mogadishu, Somalia

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ABSTRACT

Service quality is crucial for all service providers operating in the open market across all industries, particularly in the aviation sector, which produces billions of dollars in annual revenue from its services. The level of service quality significantly influences client satisfaction, and conversely, customer happiness reciprocally affects the service provider. In order to attain diverse company objectives, it is imperative to prioritize customer happiness specifically during the process of privatization. The primary objective of this research is to examine the influence of airport service quality on customer satisfaction within the context of a privatized airport. Descriptive and correlation analysis were utilized in the study. A total of 400 questionnaires were administered to passengers who embarked from Aden Adde International Airport as part of the study. Subsequently, the data was subjected to analysis utilizing a statistical software program designed for social science software (SPSS). The results of this analysis revealed a robust and positive correlation between Airport customer services and customer happiness. The study additionally revealed that a significant proportion of the airport's passengers expressed dissatisfaction with the services provided by Aden Adde International airport.

Introduction

Airports serve a crucial role within the air transport system as they provide essential infrastructure for the seamless transition of people and freight between ground and air modes, as well as facilitating the operation of flights by airlines. (Graham, 2018). Nevertheless, airports encounter difficulties in producing and maintaining their revenue, as they are limited to covering their expenses solely through non-aeronautical sources of income. Airports generated over $180 billion in revenue in 2018, reflecting a 1.4% growth. However, the average revenue per passenger on a global scale was $18.49, with a corresponding expense of $14.11 per passenger. This figure encompassed $7.44 from non-aeronautical sources and $9.99 from aeronautical sources. (Lioutov, 2021). Hence, it is imperative for airports to augment passengers' happiness with their services, given that passengers constitute a significant portion of their income streams.

The success of any service industry, particularly the Aviation sector, is heavily influenced on customer happiness. According to Kumar and Singh (2022), customer satisfaction can be described as the outcome of evaluating the service provided in relation to the customer's initial expectations. Hence, the initial perception of a place by passengers is shaped by the amenities and level of service they encounter at the airport. Therefore, it is imperative to evaluate the caliber of airport services by the measurement of passengers' happiness. This can facilitate comprehension of passengers' expectations and preferences (Bellizzi et al., 2018).

According to a study conducted in Brazil by Bezerra and Gomes (2020), there is a significant relationship between airport service quality and customer happiness. The study also reveals that the cost of choosing an alternative airport is more pronounced when the accessibility to the airport in question is superior to that of the current airport. According to Bao et al. (2016), their findings indicate that a 1% enhancement in accessibility is associated with a 2% rise in passenger traffic and a notable enhancement in airport

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competitiveness. (Allen et al., 2020) have It has been stated that the airport environment plays a crucial role in influencing passenger happiness. It is recommended that airport management businesses allocate greater resources towards enhancing the accessibility of information, maintaining cleanliness in terminals, increasing InfoPoint services, and strengthening security personnel. In a recent study conducted by Ayodeji and Rjoub (2021), it was shown that passengers' satisfaction with waiting time is influenced by two primary factors: the perceived and experienced waiting time, and the utilization of self-service technologies.

Similar to Aden Adde International Airport (AAIA), certain airports function within less competitive market environments compared to others. Consequently, users may have limited alternatives to select from. This absence of competition may give rise to the possibility of these airports exploiting their market dominance by neglecting service quality (Halpern & Mwesiumo, 2021). Therefore, does the service quality of AAIA align with the expectations of its customers? Nevertheless, there remains an unresolved inquiry regarding the influence of Airport service quality on customer satisfaction throughout the privatized era at AAIA. Given that this airport underwent privatization over a decade ago and no study has been conducted on customer satisfaction, there exists a significant knowledge deficit that necessitates an investigation into this subject.

This paper will ultimately comprise multiple sections. The study commences with an introduction, which is then followed by a comprehensive literature review, research methods, findings and subsequent deliberations, and ultimately a conclusion.

Literature Review

This section aims to provide a comprehensive evaluation of the current body of literature pertaining to airport service quality and customer satisfaction. This will facilitate the identification of many concepts, theories, and models employed in the examination of this phenomenon. In addition to the deficiencies and replications in the existing knowledge. The review's methodology involves initially providing an overview of the theoretical and conceptual foundations pertaining to airport service quality and customer satisfaction. Next, this section will include an empirical assessment of prior research that has examined the quality of airport services and customer satisfaction, along with the factors that impact these variables.

Theoretical and Conceptual Background

The evaluation of customer satisfaction is a judgmental procedure that is significantly influenced by individual expectations. It can be encountered in diverse situations and utilized in the development of products and services. The amount of satisfaction is contingent upon the customer's interaction with the company and the result they obtain. The ultimate determinant of customer happiness is in the nature of the relationship established between the client and the provider of a product or service. Customer satisfaction scores are often regarded as the most reliable indicator of a company's future profitability. (Cengiz, 2010). The act of guaranteeing client pleasure can provide numerous advantages for the provider of a product or service, including the establishment of trust, maintaining a competitive advantage in the market, and augmenting revenue (Bin et al., 2020). Hence, in order to attain diverse organizational objectives, it is imperative to prioritize customer happiness.

Conversely, empirical investigations have demonstrated that the caliber of service rendered plays a pivotal role in forecasting client contentment (Hasfar et al., 2020; Khamis & AbRashid, 2018). It is well acknowledged by service providers worldwide that maintaining a constant level of service quality is crucial for fostering client loyalty and pleasure. According to Vazifehdust and Farokhian (2013), this leads to a decrease in the expenses associated with obtaining new clients and a gain in market share. Companies can enhance customer satisfaction and foster stronger relationships by delivering superior services (Hasfar et al., 2020).

The present study will utilize the conceptual model depicted in Figure 1, whereby customer satisfaction is positioned as the dependent variable on the right side, while airport service quality is positioned as the independent variable on the left side.

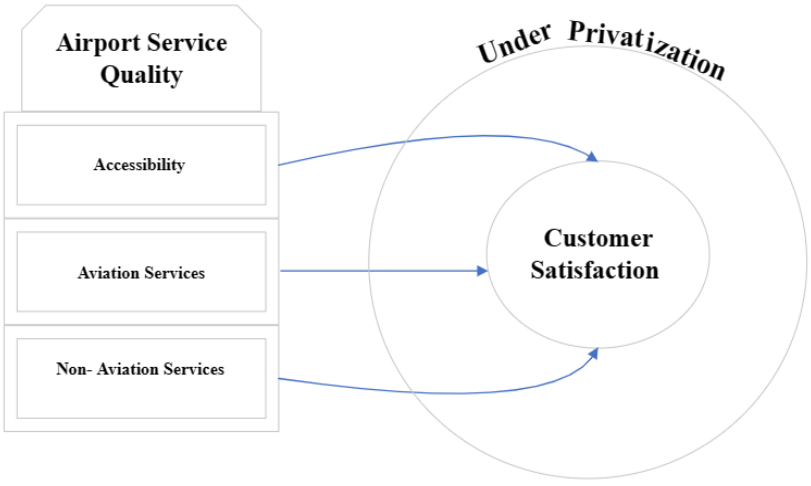

Figure 1: Conceptual Framework; Source: (Author, 2023)

The present study employed the design proposed by Gitto and Mancuso (2017), wherein Airport services were classified into two distinct categories: aviation services and non-aviation services.

Numerous models are employed across several industries globally to assess service quality, one of which is SERVQUAL. (Jogoo & Cim, 2018) contended that while this model is widely used in different sectors, it has constraints in effectively addressing the distinctive attributes of the aviation business. In a similar vein, Park et al. (2006) highlighted that both SERVPERF and SERVQUAL fail to encompass all aspects of aviation services. Hence, the author has opted for the Airport Service Quality (ASQ) tool, which possesses the capability to evaluate diverse aspects such as departure, arrival, and other relevant factors, in accordance with specific requirements. The primary aim of this study is to ascertain the services that have an influence on passenger satisfaction. As per the findings of Isa et al. (2020), this tool is deemed valid for assessing the quality of airport services. Therefore, this research will employ the ACI technique, specifically examining the eight dimensions of departure, namely Accessibility, Security, Check-in, Passport/ID control, food and beverage, Airport Facilities, Wayfinding, and Overall satisfaction. The study will specifically concentrate on passengers at the point of departure.

Prior to categorizing the eight aspects into two distinct groups, the author has noticed a noteworthy issue that is not commonly encountered by the majority of airport travelers globally during their entry to the airport. A shuttle bus service is operated by a private firm at Aden Adde International Airport, connecting the Airport to its station located approximately 1.7 km distant from the Airport (as depicted in Figure 3). Regular customers are prohibited from utilizing taxis or their personal vehicles to access the Airport. Instead, they are required to utilize the shuttle bus, which incurs a high cost of $11 per ride, as reported by Goobjooge (2016) and Maal magazine (2016). Figure 4. Prior to embarking on the shuttle bus, passengers are subjected to comprehensive robot examinations encompassing both their personal possessions and themselves. After alighting from the bus, further examinations are promptly carried out, whereby the passengers' belongings are positioned on the floor for scrutiny by proficient olfactory canines (as depicted in Figure 5). These operations take place outside the Building of the Airport.

In recent studies, Chen et al. (2015) and Lopez-Valpuesta & Casas-Albala (2023) have posited that the dimension of accessibility plays a crucial role in determining passengers' pleasure. According to Oh and Park (2014), accessibility emerges as a crucial determinant in the selection of an airport. Furthermore, Bao et al. (2016) found that a marginal increase of 1% in Accessibility was associated with a corresponding increase of 2% in passenger traffic.Perliska et al. (2016) It should be noted that a decrease in accessibility leads to a corresponding decrease in the market share of the Airport. According to Kouwenhoven (2008), a marginal rise of 1% in ticket price would result in a corresponding decrease of 1% in passenger demand. Likewise, the Airport switch elasticity exhibited a value of -1, indicating that a marginal rise of 1% in the ticket price at a particular Airport would result in a corresponding substitution of 1% of passengers to an alternative Airport. Hence, it is apparent that both the ease of access and the cost have an effect on travelers. The present study conducted a separate analysis of this particular dimension, while categorizing the remaining dimensions into aviation and non-aviation services.

Figure 2: The Distance between AAIA and the bus station; *Source:* Google Maps.

Figure 3: AAIA shuttle bus ticket; *Source:* (Maal magazine, 2016)

Figure 4: Inspections at AAIA; *Source:* (Ghedi, 2016)

Empirical Studies

During times of crisis, such as the COVID-19 issue, it is crucial to assess passenger happiness in aviation, as it may decrease. Nevertheless, the scholarly literature at Saville, Spain has not thoroughly investigated the influence of the COVID-19 epidemic on airport passenger happiness. According to Lopez-Valpuesta and Casas-Albala (2023), and the objective of this study was to address this research gap by evaluating passenger happiness at airports between 2015 and 2021, taking into account both passenger characteristics and airport factors. The research employed a substantial dataset derived from surveys on Airport Service Quality and conducted an analysis utilizing ordered logistic regression. The findings of the study indicate that passenger satisfaction exhibits statistical variability based on factors such as country, travel reason, and destination. Additionally, the research demonstrates that key considerations such as cleanliness and comfort, check-in procedures, information and accessibility, and security measures are of utmost importance. In the context of health emergencies, passenger happiness is primarily influenced by two key factors: cleanliness and comfort.

In Asia, Cao et al. (2023) conducted a study to enhance the passenger-centricity of Urumqi Airport in Xinjiang, China, through an analysis of its facilities and services. In order to accomplish this, the writers sent a 2007 survey to travelers in different sections of the Airport. Out of the total passengers, 63% were passengers leaving, 28% were passengers arriving, and 9% were passengers being transferred. The cloud model was employed, the contributive rule technique was expanded to include service satisfaction, and the significance of each item was evaluated. The findings of the study indicate that passengers expressed primary concerns regarding baggage, safety, and flight delay services. Additionally, passengers expressed dissatisfaction with catering, retail, and airport traffic services, highlighting the need for improvement in these areas. The study revealed that passenger satisfaction levels can vary among terminals within the same airport. Specifically, Urumqi Airport Terminal 1 had lower levels of satisfaction compared to Terminals 2 and 3.

The study conducted by Ayodeji and Rjoub (2021) was to evaluate the influence of waiting time satisfaction and self-service technology on the attainment of sustainable customer loyalty in two international airports located in Istanbul, Turkey. A total of 735 questionnaires were delivered by the authors. The data was examined by the investigators using partial least squares structural equation modeling (PLS-SEM). The findings indicate that passenger satisfaction with waiting time is influenced by two primary factors: the perceived experience during the waiting period and the utilization of self-service technologies. Furthermore, the research revealed a clear and statistically significant correlation between the utilization of self-service technology, the level of satisfaction with waiting time, and the degree of consumer loyalty.

Awad et al. (2020) did a study in Dubai, United Arab Emirates. The objective was to evaluate the passengers' assessment of the quality of airport services at Terminal 3 at Dubai International Airport. The researchers found various aspects that have an impact on passengers' pleasure and perception of the Airport. These factors include Terminal Services, check-in procedures, accessibility, assurance and empathy, as well as service availability. The research sample comprised 275 individuals who have encountered airport services during their travels. The data is examined by the authors through the application of diverse analytical approaches, including the Structural Equation Model (SEM) and confirmatory factor analysis (CFA). The findings indicate that a majority of passengers express pleasure with the services provided by the Airport. The primary factors influencing satisfaction and impression are assurance, empathy, availability, and check-in. The study conducted by the scientists also revealed a significant relationship between nationality and travelers' airport experience. Specifically, it was observed that Middle Eastern passengers exhibited higher levels of satisfaction and good impressions compared to their Asian counterparts. Surprisingly, the researchers observed that the level of accessibility does not have a substantial effect on satisfaction or impression.

Simultaneously, the mission of the journey does not influence the correlation between contentment and the quality of airport service. Allen et al. (2020) did a study on service quality in a medium air terminal in Italy. They employed the Sem-Mimic approach to gather data from passengers at Lamezia Terme Airport. The authors of this study conducted in-person interviews over a period of two years, specifically from 2015 to 2016. The survey has a sample size of 2,224 respondents.

The study demonstrates that passenger happiness is mostly influenced by control and environment.

In a recent study conducted by Zuniga-Garcia and Machemehl (2021) in Austin, Texas, the researchers examined the impact of transportation network companies on traffic flow to and from the airport using intelligent transportation systems. The findings revealed that the absence of transportation companies led to higher traffic speeds in the airport access area. The presence of transportation companies resulted in a 9% reduction in speed during the morning peak hour and an 18% reduction during the afternoon peak hour at the airport. Consequently, this led to a total passenger cost exceeding $150 and $400.00 per hour in the morning and afternoon, respectively. According to Bezer & Gomes (2020), After a year, a study was conducted in Brazil and shown that airport service quality has a significant impact on customer satisfaction. However, the study also indicated that the cost of choosing another airport is much higher when the airport is more easily accessible than the current airport. According to Bao et al. (2016), their findings indicate that a 1% enhancement in accessibility is associated with a 2% rise in passenger traffic and a notable enhancement in airport competitiveness.

Similar to passengers of AAIA, the closest international airport is located at a distance exceeding 5 hours by car. Certain airports operate with less competitive marketplaces compared to others, potentially limiting the range of options available to users. This absence of competition may give rise to the possibility of these airports exploiting their market dominance by neglecting service quality. Halpern and Mwesiumo (2021) . Various scholars have reported divergent findings about the impact of airport service qualities on passengers. According to Bakir (2023), accessibility emerged as the most prominent feature among the many characteristics assessed for airport service quality. According to Kováđiková et al. (2023), The passenger experienced significant waiting times at passport control, followed by waiting times at security inspections, as well as challenges related to the ease of airline connections. According to Rubio-Andrada et al. (2023), Allocating resources towards information technology enhances the overall satisfaction of customers, and female participants highly appreciate utilizing technology for all airport operations.

According to Oliveira et al. (2023), passengers who encounter aircraft delays are less like to express satisfaction with their airport experience. However, people can enjoy improved well-being by having access to high-quality food and beverages, as well as a high-speed internet connection at the airport. Additionally, the researchers noted that discontent with airline services has the potential to generate dissatisfaction inside the airport environment. According to the findings of Liao et al. (2022), the significance of the dimension is contingent upon the specific type of airport.

Therefore, the present study aims to examine the overall satisfaction levels of consumers, while also considering demographic factors, and explore the potential correlation between airport service quality and customer satisfaction within the context of privatized airports.

Research and Methodology

This study employed a descriptive, correlation, and survey research design. This design was considered more effective in investigating the impact of Airport service quality on customer satisfaction under privatization at AAIA in Mogadishu, Somalia. The independent variable is Airport service quality measured by the group of its dimensions (Accessibility, Aviation, and Non-aviation services), while the dependent variable is customer satisfaction. Additionally, this study also uses a quantitative approach. The population of this study is departure passengers of Aden Adde International Airport who used the Airport’s services during the privatization period. The Airport has two types of departure passengers: domestic and international. The author relies on the 2019 passengers’ data as the only latest source of information for this study. Therefore, the number of departing passengers in that year, 395,057, is used as the population size for the analysis. We determined that 400 was the appropriate sample size based on two different ways, which we will present below.

The first method adapted from the (Yamane, 1973)

formula. $\boldsymbol{n = \frac{N}{1+N(e)^2}}$

N= Population. [395,057]

n = Samp size. [?]

e = Error [0.05]

$n = \frac{395,057}{1+395,057\times(0.05)^2}$ = 399.5954

Thus, after rounding, the result is n = 400.

The second method was the (Israel, 1992) table, which provides sample size using precision level and the target population. In this case, our target population is more than 100,000 passengers; thus, using 5%, our sample size shows 400 passengers.

It is stated that this sample size can be determined by applying specific criteria. The table 1 provides the minimum number of respondents the researcher has to analyze. This sample does not include missing questionnaires. (Singh & Masuku, 2014).

Table 1: Sample Size Table

Size of the Population	Sample Size
500	222
1000	286
2000	333
3000	353
4000	364
5000	370
7000	378
9000	383
10000	385
15000	390
20000	392
25000	394
50000	397
100000	398
>100,000	400

Source: (Israel, 1992)

Analysis and Findings

Information on the background of respondent

This section presents contextual details on the participants in order to ascertain their attributes and illustrate the distribution of the population in the study.

The data and characteristics of the respondents who participated in this study are presented in Table 2. The research was carried out on a sample of 400 individuals who were departing from the Aden Adde International Airport (AAIA) located in Mogadishu, Somalia.

In relation to gender, 229 out of 400 participants identified as male, accounting for 57.25% of the overall sample. In contrast, a total of 171 participants identified as female, accounting for 42.75% of the whole sample. The findings suggest that the departure passengers of AAIA in Mogadishu, Somalia were predominantly male. In addition, the research examined the distribution of passports among passengers who utilized the departure area of AAIA in Mogadishu, Somalia. Among the 400 passengers, 85.5% possessed Somali passports, and 14.5% possessed passports from other countries.

In relation to Passengers with Reduced Movement (PRM), it was found that 98 out of 400 participants identified as disabled passengers, accounting for 24.5% of the whole sample. Simultaneously, a total of 302 participants, accounting for 75.5% of the sample, did not possess a disability. The respondents' age group was classified into four distinct categories. A total of 40 participants

fell between the age range of 18 to 25, representing 10% of the sample. Furthermore, out of the total respondents, 203 individuals, accounting for 50.7%, fell between the age range of 26 to 35. Additionally, 111 respondents, representing 27.8% of the total, were between the ages of 36 and 45. Finally, the remaining 46 participants were aged 46 years or older, accounting for 11.5% of the total. The majority of AAIA passenger respondents fell within the age range of 26 to 35.

Table 2: Demographic Analysis

Demography	Category	Frequency	Percent
Sex	Male	229	57.2%
	Female	171	42.8%
	Total	400	100%
Passport	Somali	342	85.5%
	Other	58	14.5%
	Total	400	100%
PRM	Yes	98	24.5%
	No	302	75.5%
	Total	400	100%
Age	18 - 25	40	10%
	26 -35	203	50.7%
	36 - 45	111	27.8%
	46 & over	46	11.5%
	Total	400	100%
Mode	Bus	263	65.8%
	Taxi	67	16.7%
	Private car	51	12.8%
	other	19	4.7%
	Total	400	100%
Trips of last 12 months	0 -2 trips	231	57.8%
	3 - 5 trips	100	25%
	5+ trips	69	17.2%
	Total	400	100%
Trip Purpose	Business	110	27.5%
	Leisure	144	36%
	Other	146	36.5%
	Total	400	100%
Travel With	Family	118	29.5%
	Alone	240	60%
	Other	42	10.5%
	Total	400	100%
Earliness	Less than 2 Hours	110	27.5%
	2 - 3 hours	168	42.0%
	More than 3 hours	122	30.5%
	Total	400	100.0%
Terminal	Domestic	213	53.25%
	International	187	46.75%
	Total	400	100.0%

Furthermore, the analysis revealed that the majority of departing passengers, specifically 263 individuals, accounted for 65.8% of the total. Conversely, 16.7% of the respondents, equivalent to 67 individuals, opted for a taxi to get to the airport, while 12.8% of the respondents, or 51 individuals, utilized private cars for the same purpose. In contrast, a minority of 4.8% of the 19 respondents opted for the alternative option labeled as "other."

Out of the total respondents, 57.75% (equivalent to 231) said that they had traveled between 0 and 2 times in the past year. A total of 100 passengers, constituting 25% of the respondents, indicated that they had engaged in three to five excursions throughout the preceding 12-month period. A total of 69 participants, accounting for 17.25% of the sample, reported alternative travel frequencies.

With respect to the objective of the previous journey, 110 participants, accounting for 27.5% of the overall participants, embarked on a business trip. In contrast, a total of 144 participants, accounting for 36% of the overall sample, engaged in leisure travel. The remaining participants expressed other choices, including familial visits, educational pursuits, and medical justifications.

Out of the total number of respondents, 240 individuals, accounting for 60% of the sample, reported traveling alone. Additionally, 118 respondents, representing 29.5% of the sample, indicated that they went with their families. The remaining 42 respondents, constituting 10.5% of the sample, reported traveling with others.

In relation to the pre-flight arrival time at the airport, it was found that 27.5% of the participants arrived at the airport within a two-hour timeframe, whereas 42% arrived between two to three hours prior to their flight. The remaining 30.5% arrived past the three-hour mark.

Ultimately, the participants utilized two terminals to indicate their destination, either foreign or domestic. A total of 213 respondents, accounting for 53.25% of the sample, utilized the domestic terminal. Conversely, the remaining 187 participants utilized the international terminal, accounting for 46.75% of the total.

Satisfaction ratings of different indicators

Table 3 presents the satisfaction ratings of different indicators of airport services. The study will list and provide relevant information and discuss later for those who receive high and low ratings. In the first dimension, the author measured five indicators: accessibility options, convenience of accessibility, price, availability of parking, and availability of baggage trolleys/carts upon arrival at the airport. In the second service dimension, the author measured eight indicators: waiting time at security, waiting time in the check-in area, flight screens, help counters, staff language skills, passenger services for those with reduced mobility, efficiency of passport and ID inspections, and baggage handling process. in the third dimension, the author measured eight indicators: clarity of signs, availability of ATM's, terminal congestion, airport temperature, shop/restaurants, cleanliness, and availability of seats.

Table 3: satisfaction/dissatisfaction * indicator

Indicator		**Unsatisfied**	**Satisfied**
Accessibility	Price	69%	15.6%
	cart/trolls	67.3%	17.85
	Parking	65.4%	13.15
	Convenience	62.3%	15.45
	Options	58.5%	21.1%
Aviation Services	flight screens	65.6%	15.95
	waiting time at the security	62.2%	21.35
	Waiting time in the check-in area?	54.3%	26%
	Help counters	54%	23%
	PRM service	51.9%	26.3%
	Passport inspection efficiency	51.2%	27.95
	Baggage handling	51%	27.5%
	Staff’s language	49%	26.7%
Non-Aviation Services	Baby changing rooms	70.1%	13.35
	Clarity of signs	61.9%	15.85
	ATM	61.6%	16.85
	Congestion	56.2%	19.8%
	Temperature	56.2%	25.5%
	Coffee shops	51.5%	28.7%
	Cleanliness	51%	31.9%
	Seats	48.7%	29.0%

Source: (Author 2023).

Satisfaction ratings of the service dimensions

The researcher also analyzed how airport service dimensions differed when examining passenger satisfaction, and the results are presented below charts.

Figure 5 is the first dimension of this study's accessibility. The study found that 34% of all respondents were not satisfied with the accessibility of the airport, while 30% of the respondents were satisfied with accessibility, and the remaining 36% responded neutral.

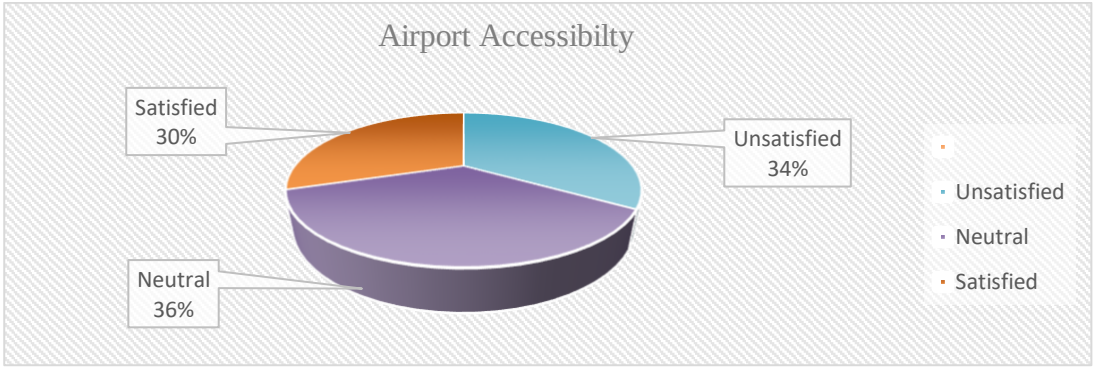

Figure 5: Airport Accessibility.

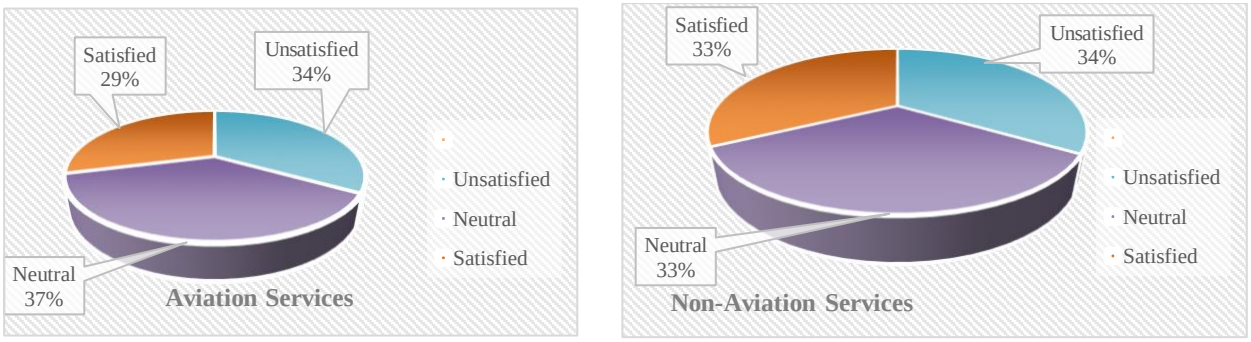

Figure 6: Aviation services and non-aviation services * Satisfaction/dissatisfaction

The second dimension of service quality was Aviation-related services such as check-in baggage handling. Most respondents were not satisfied with service-related aviation; 34% were unsatisfied, 37% were neutral, and only 29% were very or somehow satisfied. The last dimension of airport service was non-aviation services; again, the passengers rated higher satisfaction than others, but the dominant respondents were unsatisfied. 33% of all respondents were satisfied with this dimension, 33% were neutral, and 34% were unsatisfactory. We also analyzed the satisfaction of all airport services, As shown in Fig 7. The study indicated that most respondents were not satisfied with airport services, 34.5%. While 33.8% were satisfied with airport services, and the remaining 31.7% were neutral.

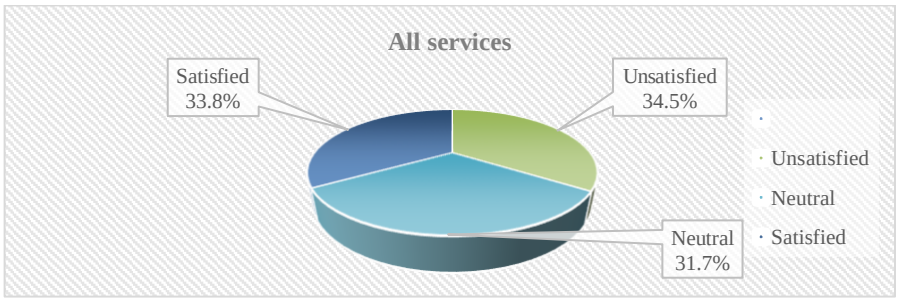

Figure 7: All services * Satisfaction/Dissatisfaction.

Correlation Analysis

The correlation between airport service quality and customer satisfaction is presented in Table 4, which consists of the three dimensions of airport service quality and satisfaction. The correlation between Accessibility and Satisfaction, as shown in the table, is 0.784, a strong positive correlation between them.

Table 4: Correlation

		Accessibility	Aviation service	Non-Av. Services	Satisfaction
Accessibility	Pearson Correlation	1	0.859	0.812	0.784
	Sig. (2-tailed)		0.000	0.000	0.000
	N	400	400	400	400
Aviation service	Pearson Correlation	0.859	1	0.894	0.884
	Sig. (2-tailed)	0.000		0.000	0.000
	N	400	400	400	400
Non-AV. Service	Pearson Correlation	0.812	0.894	1	0.865
	Sig. (2-tailed)	0.000	0.000		0.000
	N	400	400	400	400
Satisfaction	Pearson Correlation	0.784	0.884	0.865	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	400	400	400	400

Source: (Author 2023)

The results of the second test examining the relationship between satisfaction and Aviation services indicate a significant positive connection, with a coefficient of 0.884. Non-aviation services and satisfaction constitute the third aspect. It has been observed that a robust positive association exists between these variables. Hence, the aforementioned correlations demonstrate a robust and favorable association between the quality of airport services and the level of customer happiness. An increase in one variable is typically accompanied by an increase in the other variable.

Table 4 illustrates the relationship between airport service quality and customer satisfaction, encompassing the three characteristics of airport service quality and satisfaction. The table above demonstrates a robust positive correlation of 0.784 between Accessibility and Satisfaction. The results of the second test examining the relationship between satisfaction and Aviation services indicate a significant positive connection, with a coefficient of 0.884. Non-aviation services and satisfaction constitute the third aspect. It has been observed that a robust positive association exists between these variables. Hence, the aforementioned correlations demonstrate a robust and favorable association between the quality of airport services and the level of customer happiness. An increase in one variable is typically accompanied by an increase in the other variable.

Discussion

This study reveals a robust positive association between airport services and customer satisfaction, indicating that an enhancement in airport service quality is associated with a corresponding rise in consumer contentment. Nevertheless, the majority of participants expressed dissatisfaction with airport services, as only 33.8% reported being content. This observation implies that there exists a necessity to enhance airport services in order to augment client happiness. The results of our study also revealed that a majority of respondents expressed dissatisfaction with non-aviation services, with only 33% expressing satisfaction. This finding differs slightly from the study conducted by Gitto and Mancuso (2017), where respondents rated non-aviation services as positive (33%), negative (29%), and neutral (38%). Moreover, the majority of participants expressed dissatisfaction with airline services, with a mere 29% expressing satisfaction. This finding contrasts with the outcome reported by Gitto and Mancuso (2017), wherein 56% of the participants expressed a positive evaluation of aviation services. This implies that there exists a necessity for enhancing aviation services in order to augment levels of contentment.

The survey examined the impact of demographics on satisfaction levels, revealing that the majority of respondents (65.8%) utilized bus transportation to commute to the airport. Conversely, a survey carried out in Saudi Arabia (Alhussein, 2011) revealed that a mere 2.3% of the participants utilized buses, whereas the majority opted for limos (55.6%) and taxis (42.1%). The findings also indicated that bus passengers exhibited the highest level of dissatisfaction among the respondents, whereas taxi customers demonstrated the highest level of satisfaction with all airport services. Additionally, the study revealed that travelers who arrived at the airport early exhibited lower levels of satisfaction compared to their counterparts. This conclusion contradicts the results reported by Bezerra and Gomes (2015), who demonstrated that passengers who arrived earlier exhibited a higher likelihood of experiencing satisfaction. They stated that fliers who flew less frequently were also more inclined to be content. Currently, this study has also determined that individuals who fly less frequently are more content than those who fly more frequently.

The research additionally revealed that domestic travelers exhibited higher levels of dissatisfaction compared to their foreign counterparts. According to Chengiz (2010), customer satisfaction can be described as the evaluation of services obtained in relation

to the customer's level of satisfaction. This implies that customer happiness is contingent upon the customer's predetermined expectations. Hence, the researcher posits that local customers anticipate their airport to resemble other airports they are familiar with or have previously utilized. Consequently, if the services they anticipate are not provided, they will be dissatisfied. Conversely, international travelers exhibited a high level of satisfaction, potentially due to their potential misconceptions regarding airport services. The services they received above their expectations, leading to their overall satisfaction.

The study additionally examined the factors that garnered the greatest levels of happiness and dissatisfaction among travelers at airports. According to the survey, cleanliness was the most important factor influencing customer satisfaction with the service. This was followed by factors such as seat availability, coffee and restaurant options, efficiency of passport and ID inspections, baggage handling process, and staff language proficiency. On the other hand, the factors that elicited the highest levels of dissatisfaction were infant changing rooms, followed by the price of airport shuttle bus tickets, luggage trolls, flight screens, airport parking availability, and airport convenience. Remarkably, four of the primary signs of discontent originate from the accessibility component. The absence of any indication pertaining to accessibility within the top ten of the satisfied indicators suggests a lack of satisfaction among the respondents regarding the services provided in this particular region.

Implications

In both theoretical and practical contexts, this finding holds significant significance. This study contributes to the current body of literature on airport service quality and passenger satisfaction by specifically examining the services provided by a privatized airport, which has received limited attention in previous research. Furthermore, it enhances the aviation literature of the region, specifically in Somalia, where further investigation is required.

The research offers significant insights for policymakers and organizational leaders. This tool has the potential to aid authorities in their negotiating and decision-making procedures pertaining to the influence of service quality on customer satisfaction. It can also serve as a catalyst for these authorities to prioritize the application of service quality over other factors, such as revenue generation and infrastructure enhancements.

The investigation moreover aids managers in comprehending the level of consumer contentment and identifying areas that want enhancement. The managers are encouraged to engage in a conversation with the authorities regarding methods to improve the services. This includes enhancing the accessibility of the airport for regular passengers, which is now restricted to a shuttle bus with inadequate fares. This issue is a major cause of customer unhappiness. Moreover, airports that strive to cultivate a favorable perception should enhance their levels of satisfaction by implementing novel approaches and resolving areas of dissatisfaction. These include the provision of baby change rooms, which hold significant importance for families traveling with children, the expansion of parking facilities, the incorporation of flight information screens, and the provision of baggage trolleys. These strategies have the potential to improve the overall customer experience and increase the reputation of the airport. This implementation enhances the competitiveness and appeal of the airport for both domestic and international tourists.

Conclusions

The study's findings indicate that there is room for improvement in the airport services provided by Aden Adde. Nevertheless, the number of passengers at the airport has increased since the establishment of this company and is expected to continue growing in the near future. The enhanced security situation in Somalia and its recent incorporation into the East African Community (EAC), a regional alliance including more than 300 million individuals with unrestricted cross-border mobility, can be ascribed to this phenomenon. Nevertheless, it appears that the airport is experiencing a deficiency or insufficiency in crucial services. Therefore, it is important to implement novel services or enhance the current ones in order to address the growing demand and guarantee consumer contentment. The study demonstrated a positive correlation between airport service quality and customer satisfaction, suggesting that higher levels of service quality are associated with increased consumer contentment. The present study examined the level of satisfaction among passengers at Aden Adde International Airport, an airport that has undergone privatization. The findings indicated that the services were superficial; they were offered by two distinct commercial organizations that provide airport accessibility and other related services. The results of the study revealed that the customers expressed unsatisfactory ratings for the services provided by these companies, suggesting that the privatization of airport services failed to match their anticipated standards.

Recommendations

Firstly, it is recommended that the Somali government actively promote the engagement of academics in conducting studies within the country, while also ensuring the provision of insensitive data to these researchers. Furthermore, it is imperative for the government to exercise oversight over the contracts awarded to private enterprises in order to ascertain their compliance with contractual commitments and provision of high-quality customer service. We additionally propose that the government enhance the accessibility of airports for passengers and exercise control over pricing dynamics. This can be achieved by the allocation of resources towards the development of public transportation infrastructure and the implementation of regulations pertaining to private transportation service providers. Therefore, We suggest that the airport management firm improve the quality of their unsatisfactory services, while also expanding their range of services and incorporating any missing services that can enhance client satisfaction. The organization should additionally administer surveys to ascertain clients' perceptions of its services and pinpoint areas that require enhancement.

We suggest that scholars, particularly those from Somalia, delve deeper into the study of Somali aviation in order to address the dearth of data in this field. Through more investigation in this particular domain, scholars have the potential to enhance the aviation sector.

Suggestion for further research

The primary objective of this study was to examine the influence of airport service quality on customer satisfaction within the context of a privatized airport, specifically Aden Adde International Airport. It is important to note that the scope of this study was limited to departing passengers of the airport. Nevertheless, there remain numerous opportunities for additional investigation in this field. Several potential future directions can be identified:

i. In order to assess the relative merits and drawbacks of privatization, this study aims to conduct a comparative analysis of passenger satisfaction between Adden Adde International Airport and comparable non-privatized airports within the country/region.
ii. An exhaustive examination of passenger contentment in various airport sections, including Domestic, Arrivals, and Transfers, with the aim of pinpointing the precise elements of airport service excellence that impact passenger happiness.
iii. An assessment of the variables that impact passenger contentment or discontentment with the airport, such as ease of access, in order to comprehend the fundamental causes for passenger perception and anticipations.
iv. An inquiry of employee contentment at the airport during the process of privatization, aimed at examining the impact of privatization on staff drive, productivity, and welfare.

Limitations of the study

It is important to acknowledge the limitations of this study. The survey was exclusively administered to the departing passengers of the airport, perhaps impacting the applicability of the results. The rationale for this decision was to mitigate potential confusion among the participants, given that the services assessed in the survey are distinct inside the departure area, encompassing check-in, boarding, baggage handling, staff politeness, and lounge accessibility. Hence, the questionnaire was specifically tailored for departing customers as they possess the ability to offer comprehensive feedback regarding these airport services. Furthermore, the survey was conducted through an online platform, which could potentially provide difficulties in terms of the rate of response. The online mode was chosen due to the extensive size of the target population and the geographical distance between the researcher and the target area, which posed challenges in terms of in-person accessibility.

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