

Common Security Threats In A Typical Nigerian Rail Station A Case Study Of The Kano Rail Station

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Abstract

The recent rise in the security threat in public facilities and infrastructures in Nigeria has made individuals very sceptical about using such facilities. This has placed a heavy burden on the government and other non-governmental organizations on orienting the general public on security measures while using the infrastructure. This paper assesses the common security threat posed in the use of a typical Nigerian railway station taking into consideration the Kano railway station with a view of enlightening the general public and the government on security facilities measures to mitigate these threats. It was conducted with a structured questionnaire to a hundred fifty passengers and/or staff of the rail station with a hundred and thirty-four returned adequately filled giving a percentage response of 89.3% and the data gotten were analyzed using the SPSS version 19.0. The result reveals among others that the most common security threat experienced in train station facilities is the fear of bombing as the place is always crowded and the terrorist operates in a place with clustered the crowd for greater impact. Other common threats of urgent concern include; the challenge of kidnapping, Car Snatching and stealing. Consequently, it is recommended that Facilities managers should devise measures to promote public awareness and enlighten the general public on security challenges and threats with the station while providing installation and maintenance of functional security detecting and readiness facilities.

Keywords: Security Provision, Railway Station

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I. Introduction

The movement of people and materials between places is a necessary corollary of modern life. People in a quest to satisfy their needs ranging from professional, psychological, religious and personal need travel (Hanumappa et al. 2015). One of the numerous public means of transportation by land is the railway and the quality of services either within the station or in the train vary from country to country and from corporation to corporation. A railway station, train station, railroad station or depot is a railway facility area where trains regularly stop to load and unload passengers or freight, while the location where the train stops is called the rail

station. (Dinesh Sharif 2013). The railway lines have several platforms consisting of the station building where the booking offices are located and tickets are issued.

The multiple activities and facilities in the station building further broaden the chances of insecurity vulnerability and the need for a more proactive security approach. Often time some of the major challenges range from unauthorized vending, absence of adequate amenities, overcrowding, poor access control and passenger guidance stem. These and other challenges have a direct impact on the passenger's satisfaction with the use he rail facilities(Sharma 2009).

The subtle and tactical ways malicious attackers and terrorists target and inflict injuries, fatalities and structural damage on international and local utilities and infrastructure during their operations have called for drawing the attention of stakeholders and the government to the need to improve security in such utilities (Ezell, Bennett, Detlof, Sokolowski, & Collins, 2010). One of the fundamental challenges of risk analysis of terrorism is the intellectual challenges and defensive countermeasures that the terrorist poss.(Kaewunruen & Alawad, 2002)

This paper focuses on the security facilities provision at a typical Nigerian train station taking into consideration the Kano train station. The preliminary visit to a typical train station in Nigeria with Kano station inclusive shows an unpleasant delapidated environment with indiscriminate points of waste collection and disposal units around, suggesting how porous security-wise such infrastructures are(Nkeleme, Shakantu, & Ogwanighie, 2022)

The provision of security services within the station is another key service that is essential for effective station operation, growth, prosperity, and efficiency of the railway transport system. Basically, the economic impact of any disturbance on land transport system like the railway is usually enormous. Historically, there are some unfortunate specific weaknesses that encumber the mode of security from security data on land transportation (Shri Rajen Gohain 2018).

There have been several reports on attackers on trains from time memorial such as the Vienna express that was derailed by a bomb planted by Szilvester Matuska on the 13th of September 1931 simply because he got sexual pleasure watching the train crash. Several other attacks have been recorded in various countries across the continent on the 15th of September r 2017, the Parson green train bombing occurred on a district line train with thirty people injured. Recently in Nigeria, on the 28th of March, 2022, an Abuja-Kaduna train was attacked in Katari, Kaduna, at about 7.45 pm with approximately 970 passengers onboard. Six-two passengers were abducted in the attack

The train station is a business community where socioeconomic or business activities are performed to achieve optimal transportation objectives. It should be noted that every business system lies within an environment whereby enhancing FM services is necessary at all costs. The rapid decay and neglect of the train stations as well as the rising cases of insecurity in Nigeria necessitated the need for this study. Ideally, the Station facility is expected to be enticing and user friendly and offer the passengers an exciting journey experience.

FM management services in Nigerian Railway Corporation (NRC) are now fast-growing evidence has shown in the NRC tenders advertisement list as the corporation is requesting a reputable FM service provider to hire and manage some of its train station facilities (daily trust 2018). Thus, this paper assesses the train stations' security facilities' provision and FM services.

II. Literature Review

2.5 Facilities in the railway station

A railway station is engaged in passenger and cargo train operations place. It is a link between the railway with the passenger and the owner of goods. For any station to continue to stay in service there is an obvious need for routine maintenance and operational cost allotted to it. The vitality of the station's appearance cannot be over emphasized as it gives the passengers a lasting impression for the total transit experience. The functionality of a station largely depends on the design to accommodate the existing and projected/anticipated need and the need of the host communities. The various part of the railway station is as follows

A Platforms

This is section of the pathway where passengers can board or alight from the train. It is basic requirement for all rail station to provide a platform while bigger stations provide multiple rail platforms. The platforms are usually design to be positioned along the railway tracks. (Brazen, Alemu 2013). The rail platform can also stand in as a type of freight platform which usually beside the rail sliding used for loading and unloading freight from the rail cars. The platform should be designed to give free visual areas along its length so that passengers and staff can ensure safety when dispatching trains. It is required that the platform be designed

with sufficient space that can easily accommodate a larger number of passenger while ensuring that the space is not wasteful. (Biazen, Alemu 2022).

B Entrances and Exits

As the name implies it is the exit and entrance segment of the station which is usually design to allow for the passage of a reasonable number of passengers per time taking into consideration the peak periods. Also, it is important to state that there is need for the provision of an emergency exits within the station, although the design with vary depending on country the specification, safety legislation or standards set for the railways. (Biazen, Alemu 2013).

C Passenger Information System

Passenger Information Systems (PIDS) this is an information system, digitally oriented which provides the real-time information for and to the passengers. This one of the recent innovations that most train station is striving to adopt in other to improve on their customer satisfaction. The digital system also offers some other benefits like entertainment content, safety and emergency announcements as the need arises. In recent times, some companies stream their adverts using the passenger information system which serve as a good source of revenue for the train station.

D. Ticket Office

Is a room or location where tickets are sold at the station. Most rail station are designed to have both ticket office and booking office (wherewaybills are kept). However recently some trail station now sell their ticket online and even board online. Also, sometime ticket sales may also be combined with the desk or customer services desks and stores. (Biazen, Alemu 2013).

E Driver Relief Station (Restrooms)

Driver's restroom facilities shall be located in an area convenient for the train and taxi operators. These facilities are not open to the general public. Building design shall follow the standard layout for restroom facilities.

F. Concessions (Refreshment)

This usually the hob of economic activities with the station that house things like the coffee shops, refreshment counters, pharmacies lunch rooms, newspaper shops flower shops. It is often provided given any opportunity wherever and whenever possible. However, as a security tip, it is advised there should be a limit to the kind of activities that transpires in such place as it can be a big security loophole. Also, it is required that the design of the concessions should be done considering the first place and subsequent good estate management such that it permits railway operations to continue unhindered

Passengers' Perception of Safety and Security

The passengers have their own opinion of the safety of the rail station perspective of the facilities provided as this has to do with the cognition, understanding and mind of the passenger According to Rundmo et.al, Jogernsen (2011), who accessed the potential hazardous risk sources that passengers using trains are exposed to, it was identified that the risk perception largely influence the passenger's opinion of their safety. Similarly, in the work of Ibrahim et al (2013), the respondent cited robbery and snatching as their most common risk threat in the use of public train facilities.

There is no doubt that the design and layout of the transport facilities and services can only be considered to be well accomplished by the passengers if its safety and security needs are tackled by the presence of security agency personnel and complemented by security cameras, where feasible. (Iseki, Taylor, 2010).

Another major passenger's perception on the security is that most cases of overloading of passengers especially at peak periods have resulted in compromise security of the passenger and even the sexual harassment of female passengers. In addition of the issue of overloading is that side compromising the security of the passengers, it also led to discomfoting of the passengers especially those on a long-distance journey with the train. (Ibrahim, et al., 2013)

III. METHODOLOGY

The study adopted the use of a qualitative and quantitative research approach involving the use of the questionnaire, and interview. For this study, the questionnaire was distributed to users and workers within the Kano train facilities. The Kano train facility is an inter-state train station, and the respondents were drawn from both the passengers and staff of the corporation to get a generalized opinion of the rail station.

With regards to the sampling size in the distribution of the questionnaire, the sampling size will be determined based on the formula below because the targeted population is unknown (because the passenger influx is fluctuating though the number of staff is identified as forty (40). (IWSD, 2003 in Macdonald, 2006)

$$n = (z^2 pq) / d^2$$

Where;

n = the desired sample size

z = the ordinate on the Normal curve corresponding to α or the standard normal deviate, usually any of the following determined based on the ‘margin error formula’

A 95% level of confidence has $\alpha = 0.05$ and a critical value of $z_{\alpha/2} = 1.96$.

P = the proportion in the target population estimated to have a particular characteristic (normal between the range of 0.1 - 0.5)

q = 1.0-p

d = degree of accuracy corresponding to the confidence level and Z selected.

Consequently, the sample size is determined as thus,

$z = 1.96, d = 0.05$ where $p = 0.1, q = 0.9$

Hence,

Sample size $n = [(1.96)^2 \times 0.9 \times 0.1] / (0.05)^2 = 138.2$

Thus the study will administer 150 questionnaires.

Data Analysis

The data collected for this study will be subjected to various statistical analyses using the computer-based software “Statistical Package of Social Sciences” (SPSS). The results of the analysis are presented in the form of a table for easy comparison and clear expression of the findings. Relative importance indices (RII) were also used to rank Areas of Emphasis during Project Monitoring. The Relative Importance Index (RII) was calculated for each document according to their frequency of use as suggested for use by Memon et al, (2006) and Othman et al, (2005)

RII ranges between zeros to one. The five-point Likert scale ranking was transformed to relative Importance Indices (RII) for each of the construction contract documents. The weighted average for each item was determined and ranks were assigned to each item, representing the perception of the respondents

$$\text{Relative Importance Index (RII)} = \frac{\sum fx}{\sum f} \times \frac{1}{k} \dots\dots\dots (3.1)$$

Where,

$\sum fx$ = is the total weight given to each attribute by the respondents.

$\sum f$ = is the total number of respondents in the sample.

K = is the highest weight on the Likert scale.

Results are classified into three categories as follows (Othman et al, 2005) when;

$RII < 0.60$ -it indicates low frequency in use

$0.60 \leq RII < 0.80$ -it indicates high frequency in use.

$RII \geq 0.80$ -it indicates very high frequency in use

IV. DATA PRESENTATION, ANALYSIS AND DISCUSSION

This section encompasses the presentation of the data, analysis of the data and discussion of the data gotten from the questionnaire survey.

Questionnaire Response Rate and Respondent Profile

Questionnaires Survey Result and Analysis

A total of one hundred and fifty questionnaires were administered to respondents within the area of study. The percentages of responses are presented in Table 1. From the table, it can be gathered that a total of one hundred and thirty-four questionnaires were received and adequately filled giving a percentage response of 89.3%.

Table 1 Questionnaire administered

Questionnaires	Frequency	Percentage of (%)
Number returned	134	89.3
Numbers not returned	16	10.7
Total	150	100

Source: Field Survey, (2019)

Respondents Profile

From the result of the analysis of the respondent’s opinions conducted, the profile of the respondents is presented in Table.2. From the table it can be deduced that a greater percentage of the respondent was male (64.2%) while only 35.8% were female. The result also revealed the categories of the respondents. From the result of the analysis, it can be deduced that 56.0% of the respondents were staff of the Kano Railway Corporation while 46.0% of the respondents were Customers/users of the railway station.

Similarly, with regards to the duration of the respondent’s experience as staff or users of the Kano Station; it can be seen that a large percentage had experience within the age bracket of 11-15year (33.6%). This was followed closely by those within the age bracket of 6-10year (26.1%); 0-5year (16.4%); 16- 20 years (14.2%) and 20 years and above (9.7%); showing that a larger percentage of the respondents have worked for a reasonable number of years in the facilities management firm

Regarding the highest academic qualification of the respondents, it can be deduced that a larger percentage of the respondents were degree holders (46.3%) with very few masters holders corresponding to just 3.0% of the respondent. Finally with regards to the area of specialization of the firms where the respondents were drawn; it was discovered that most of the facilities management firms specialized in operations and maintenance (36.6%), this was closely followed by those specialized in communications (17.9%), Emergency preparedness and business continuity (15.7%) and Environmental steward and sustainability (12.7%).

Table 2 Respondents’ Profile

S/N	Variable	Option	Frequentency (No)	Percentage (%)
1	Gender :	Male	86	64.2
		Female	48	35.8
		Total	134	100
2	Category of Respondents :	The staff of the Railway Corporation	75	56.0
		A Customer/User of the Railway Corporation	59	44.0
		Total	134	100
3	Duration of Working/using Kano Railway Station	0-5years	22	16.4
		6-10years	35	26.1
		11-15years	45	33.6
		16-20years	19	14.2
		20years and above	13	9.7
		Total	134	100
4	Highest Qualification	Ordinary National Diploma (OND)	09	6.6
		Higher National Diploma (HND)	11	8.2
		Bachelor’s Degree	62	46.3
		Post-Graduate Diploma	36	26.9
		Masters	12	9.0
		Doctorate Degree	4	3.0
		Total	134	100

Source: Field Survey, (2019)

Security Of the Rail Station

The respondent opinion and ranking of the security threat in the Kano Railway was also assessed and the result of the analysis is presented in Table 3. From the Table, it can be seen that the respondent identified ‘Bombings/Bomb Threats’ (RII= 0.79) as the highest threat because is a place for the convergence of crowd as gathered from interviews of the respondents too. Other top-ranked security threats as ranked by the respondents are: ‘Car snatching and stealing’ (RII= 0.78); ‘Employee theft’ (RII= 0.77) and ‘Kidnapping’ (RII= 0.76), ranked second, third and fourth respectively. The Details of the ranking of other security threats in the Kano Rail Station are shown in the Table.

S/N	Security Challenges	WEIGH/RESPONSE FREQUENCY									
		1	2	3	4	5	(∑f)	∑fx	MEAN	RII	RANK
1	Sexual Harassments	12	17	28	32	45	134	483	3.60	0.72	7th
2	Arson	10	19	11	48	46	134	503	3.75	0.75	5th
3	Employee theft	10	10	24	41	49	134	511	3.81	0.76	4th

4	Car snatching and stealing	7	13	21	42	51	134	519	3.87	0.77	3rd
5	Bombings/Bomb Threats	9	15	20	21	69	134	528	3.94	0.79	1st
6	Kidnapping	11	9	23	32	59	134	521	3.89	0.78	2nd
7	Extortion	6	21	25	43	39	134	490	3.66	0.73	6th
8	Political Unrest/Regional Instability/ National Disasters	20	49	10	24	31	134	399	2.98	0.60	8th
9	Workplace Violence	23	48	32	21	10	134	349	2.60	0.52	11th
10	Labor Unrest	32	34	12	21	35	134	395	2.95	0.59	9th
11	Burglary	23	49	11	32	19	134	377	2.81	0.57	10th

Table 3: Ranking of Security Threats in Kano Railways

Source: Field Survey, (2019)

Where: 1-Very Unlikely 2- Unlikely 3- Not sure 4- Likely 5- Very Likely

V. SUMMARY, CONCLUSION AND RECOMMENDATION

The following is the summary of the findings:

a) The analysis revealed that most of the respondents who were either passengers or staff of the station have had significant years of experience and exposure to the facilities as over 40.3% of the respondent have been in constant use of the station for over 10 years.

b) The result revealed ‘Bombings/Bomb Threats’ (RII= 0.79) as the highest threat because it is a place for the convergence of the crowd which tallies with the opinion gathered from an interview of the respondents too. The second most common security threat is the chances of kidnapping (RII=0.78) which was closely followed by the chances of Car Snatching and Stealing (RII= 0.77). However, other top-ranked security threats as ranked by the respondents are: ‘Car snatching and stealing’ (R reference to mean value of the analysis shows that all the factors identified are potential security threats except Workplace violence (RII= 0.52) and Labor unrest (RII=0.59) which are below the significance level of 0.6. Details are presented in Table 3.

5.2 CONCLUSION

The following conclusions can be drawn

The most common security threat experienced in train station facilities is the fear of bombing as the place is always crowded and the terrorist operates in a place with a clustered crowd for greater impact. Secondly, there are very high chances of kidnapping as ranked by the respondents. Also, the threat of ‘Car snatching and stealing’, was a significant security threat within the train station. However, contrary to the likelihood of other threats occurring, the respondent identified workplace violence and labour unrest as the least threat that is less likely to occur in the train stations in Kano.

5.3 RECOMMENDATION

The following are recommended:

- i. Facilities managers should devise measures to promote public awareness and general enlighten the general public on how to handle security challenges and threats with the stations it will help tackle security threats that are almost unavoidable in vulnerable areas.
- ii. Installation and maintenance of functional security detecting and readiness facilities that will help the facilities manager predict an impending security threat.
- iii. Adequate record tacking and acknowledgement of the complaints on any facilities so as they facilitate and improve the response interval for any complaints within the station

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