AN APPRAISAL ON SAFETY MEASURES IN THE DESIGN OF REGIONAL SHOPPING MALLS IN PORT HARCOURT

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ABSTRACT

Shopping malls are very large buildings containing a lot of stores and restaurants, members of the general public and shop staff, usually with space outside for parking, These buildings must be planned to be safe and in the event of an emergency, allow for fast and safe evacuation from the building by all its occupants, In the design of the practical issues, safety is prerequisite for any shopping mall design, Violent crime and more specially armed robberies constitute a growing threat to shopping centers in terms of their vulnerability to such criminal acts. These violent crimes are becoming ever more organized and sophisticated. Shopping centers across Nigeria have stylishly become a target for these bandits. Due to the increasing number of armed robberies and violent crimes in the state, it points to a need for improvements to be made to the security measures that are in place at shopping centers. This study explored the risks and vulnerabilities at shopping centers that have led to the need for safety at shopping centers, in Port Harcourt; the study also evaluates the current physical protection systems that are in place at shopping centers across the city in order to assist with the reduction of shopping centre crimes and fires; recommendations were made for the implementation of effective security risk control measures at shopping centre's across Nigeria and specifically the city of Port Harcourt. Self-administered questionnaire surveys were used to explore the phenomenon from the perspectives of both retail employees and customers. The data collected from the questionnaires, utilizing the non-experimental research design, were quantitatively analyzed. Based on the findings which show that both passive and active safety measures should be employed

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in shopping mall design from the study recommendations for the improvement of shopping centre security were formulated such as regular routine check of safety elements are paramount, building in compliance with National Building Code (NBC) and providing a simple evacuation plan in each floor of the building as along with recommendations for future research.

Key terms: Safety, security, design, shopping mall; violent crimes; security measures; security risk control measures; retail employee; customer; retail, Building, armed robbery

INTRODUCTION

The word shopping mall is made up of two words; shopping and mall. Shopping can be defined as the activity that involves the exchange of goods and services for money. According to Kuria (1975), it is looking at, pricing and buying merchandise displayed for sale. It is an activity that involves a seller and a buyer. A mall is a public space set aside for the public to walk. It is a major street used by the public for shopping and recreational activities Combining the two words, According to IDECK (2010) a shopping mall can therefore be defined as a building or set of buildings that provide walkways for the public to walk from one unit to another within the same building/set of buildings as they go about their business of exchanging goods and services for money. Shopping malls are typically known to be indoor shopping, though some have outdoor areas with the shops having their own indoor space. The idea came from old covered market places that were popular between the 10th and 15th centuries, and are even still around today. In 1785, the first purposely-built shopping mall was created, but it was not until 1916 that a shopping mall as we consider them today was built in the United States. During the 1950s, large indoor shopping malls began to spring up in major cities across the world, with famous ones being built in Paris and London. As automobiles and suburbs sprung up, strip malls were created, which the first shopping mall were built outside of downtown areas.

Shopping complex is one or more buildings for merchandising, with interconnecting walkways enabling visitors to easily walk

from unit to unit, along with a parking area- a modern, indoor version of the traditional market place within visually distinct scenery.

Shopping centers have become the most common of shopping environments and have influenced the makeup of cities around the world. However, in recent years, the enclosed mall has evolved and diversified with new types of retail environments that were developed to better suit their locale and meet public expectation. In the design of the practical issues, safety is one of the most important and complex considerations. Shopping malls; like any retail centre, face substantial public liability for a whole host of risks, from accidents and trips to the risk of fire. From a safety protection perspective, shopping malls are generally the most complicated of retail structures, requiring a fire alarm system sufficiently enough to provide communication between active systems such as zoned sprinklers, smoke control provision, secondary power supplies, emergency lighting and manned control centers (David, 2006).

In Nigeria, the comparative advantages of location, administrative, economic and other functional factors have contributed towards a substantial increase in shopping activities. Rising on the back of demographics, rapid urbanization, changing shopping culture and a growing middle class the expansion sweeping through the retail market in Nigeria is getting bigger as the market anticipate about 200,000 sgm of real estate space (Caroline 2014). The growth in the Nigerian retail market is a direct reflection of the growing sophistication of the Nigerian middle class, whose shopping preference has shifted from the traditional shopping in the open market, to a more organized and convenient shopping experience offered by retail malls (Odinaka, 2014). In order to achieve a convenient shopping experience, there is need for the shoppers to feel safe and comfortable; this can be achieved only by providing both active and passive safety measures in the shopping mall Shopping centre security as an entity has different meanings to the owner, to the tenant and to the customer/client. Furthermore, Flynn (1994) expands on the meanings of security according to the different role-players:

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To the owner, security means the preservation of the buildings representing the investment and the maintenance of peace and order, the absence of which will deter customer.

To the tenant, security revolves around protection of merchandise and employees, plus that same interest in a peaceful environment for customers.

To the customer, security has to do with personal safety and the safety of property while in the shopping centre or traveling to and from it.

Flynn (1994) also states that these groups of individuals are bound by a common interest. Their common interest is that they do not want the normal operation of the shopping centre disturbed or interrupted by criminals. Geason and Wilson (2002) affirm that the goal of any shopping centre is profit. Ultimately, every in-service function within the shopping centre is measured in terms of its contribution to profit. With this being said, security cannot generate tangible profits. In reference to security its cost-effectiveness is measured in terms of its contribution to the overall profitability of the shopping centre. To be successful within this function security needs to meet two interrelated and equally important objectives, namely: loss prevention which includes crime prevention and public relations which, in turn, entails making customers feel safe.

Justification of Study

The defined area for the research is Port Harcourt, Nigeria. This study gives voice to the perceptions and perspectives of the retail staff, as well as the customers that frequent shopping centers. The research explored risks and vulnerabilities experienced at shopping centers in port Harcourt.

The researcher's interest is the impact or effects caused by inadequate security measures at shopping centers, this have guided the investigation into shopping centre security.

The researcher's enthrallment in the topic grew upon the embarked literature review on the subject of armed robbery and shopping centre security. After comprehensive reading, it was found that the need for the research on shopping centre security in Nigeria was present due to the deficiencies in information on and knowledge of the topic. The researcher believes that the

project has brought to life the Nigerian retail staff and customers perspective and has contributed to the knowledge base of the topic.

Safety a Concern

Shopping centers in Port Harcourt have become dangerous places where one is not always safe from harm. As early as 2006, however, shopping centre armed robberies is not a new phenomenon and has been occurring for years. But that since mid-2008 and into 2009 this phenomenon grew noticeable to such an extent that feelings of insecurity and fear grew in terrified retailers (Anon 2010). A female employee of one of the retailers in a shopping centre in Port Harcourt had stated, at the time, that working in a shopping Centre "has added a lot of stress to her life" (Breytenbach & Hosken, 2009). This employee went on to state that "something small, such as hearing an object fall, can make you think a gun battle between police and robbers has broken out somewhere in or around the shopping centre" and "everybody is traumatized by the thought of what might happen next" (Breytenbach & Hosken, 2009). With the spike in robberies (over previous years particularly at shopping centers in Port Harcourt city areas) in mid 2008 and into 2009 customers had understandably become nervous about paying a shopping centre a visit. As put by Abramjee (2009) "criminal thugs and kidnappers have been striking in broad daylight and they have little regard for life and property". Armed robberies at shopping centers inevitability bring about quality of life concerns, such as instilling apprehension in retail staff and customers. If for this reason only, the current physical protection systems at shopping centers should therefore be critically analyzed.

The current physical protection systems in place at shopping centers According to Bailey (2009), a large part of the problem is that the current security measures in place at shopping centers are woefully inadequate and, in his opinion, a disgrace. He further reports that an assessor specializing in jewellery store robbery investigations stated that "basic security was not being adhered to" and as a result many shopping centers were being attacked more than once (i.e. criminals recognized the opportunities of such soft targets). Some shopping centers have been the targets of

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armed robberies three or four times within a six month period. Bailey (2009), also contended that up to seventy percent of the cases investigated "involved the collusion of the security guards employed at the shopping centers".

Bailey (2009), in the same article reports that an insurance company investigator, specializing in jewellery robberies, stated that there were "many frustrations involved in investigating shopping centre armed robberies" One was that of Closed Circuit Television (CCTV) cameras, which had only entertainment value and are of no real help to investigators. Furthermore, that CCTV surveillance footage is nice to watch but it is not in itself effective since it merely shows video images of how the incident happened and helps us recall the incident later for comparisons but that is all. In other words the real deterrence or preventative value of CCTV surveillance systems is limited being merely a record of events for possible use later in court and only of possible evidentiary value but then only if the quality of the images is exceptionally good. If not, then even its identification of the perpetrators value is of little use. The investigator, quoted by (Bailey 2009) further explained these drawbacks of installing CCTV cameras on the assumption that they are a panacea for shopping centre crimes, that shopping centers often have hundreds of cameras, but many of them are often either not working properly for various reasons or would not be correctly or effectively placed to gain any value from them. Shopping centers are developed to be stylish and have enough parking but often there is sufficient attention paid to security details in terms of access control and training personnel (Bailey, 2009). This research examines the current physical protection systems in place at shopping centers in an attempt to facilitate safety for both retail staff and customers, and to build the safety reputation of shopping centers (i.e. a 'safe' place to go and do everyday shopping).

STATEMENT OF PROBLEM

Although adequate safety and security including fire safety measures are prerequisites for enjoying a hazard free shopping environment; collectively they remain the most neglected issue in the context of total urban development (Martin & Andrew, 2005).

Shopping malls are associated with a variety of combustible materials from the merchandise they sell and the building materials themselves (Peter, 2006). As public facility, every shopping mall needs to be safe for human use. Fire safety measures must be considered right from the preliminary shopping mall design stage to finish. In Nigeria, shopping malls rely on fire fighters to extinguish fire rather than extinguishing from the fire safety instruments in the shopping mall. This trend has been a problem to the society and as such, the need for providing both active and passive fire control instruments in the shopping mall becomes prerequisite (Odinaka, 2014).

Over the last few years shopping centers in Port Harcourt have been the hardest hit by incidents of crime - violent and other 'softer' crimes such as bag snatching, shoplifting etc. However, shopping centre nationally has not escaped the growing trend of armed robberies (Cameron, 2009). Mrs Visser from the CGCSA, in an interview, stated that in August 2009, eight shopping centers were victims of armed robberies in one week. Each one of these centers that experienced such violent crime effectively had their reputations as 'safe havens' for shopping tarnished (Anon 2010). With shopping centre armed robberies occurring every week somewhere in Nigeria, drive these public perceptions of the dangers of shopping at big shopping centers (which have become specific targets of the armed gangs of robbers because of the more lucrative pickings at them). Accordingly, security has become a critical issue for the owners. This problem is intensified in light of the violence that invariably accompanies such attacks and which puts innocent lives at risk (Anon., 2010).

It has become reality to see robbers park a vehicle, enter a shopping centre crowded with people, bringing dangerous weapons, including firearms, in with them, steal thousands of naira's in cash and merchandise, sometimes injure or kill innocent bystanders in the process and then still manage to make an easy and quick getaway without being caught (Papp, 2009). The idea of safety in numbers (at the big shopping centers), which is the view of many citizens, seems in the view of members of the public now to be in dispute (Papp, 2009). Shopping centre armed robberies are being carried out by armed robbers who are so

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brazen because they know that their chances of being caught are slim at best (Bailey, 2009). The insurance investigator (interviewed by Bailey, 2009), agreed with the view that shopping centre robbers have become arrogant and he highlighted one of these robbery incidents wherein the robber even bought a cool drink and chocolate during the robbery (Bailey, 2009).

Due to the limited research and the impact of the phenomenon of armed robberies at shopping centers, the researcher set out to evaluate the current physical protection systems in place at shopping centers in an attempt to provide recommendations with regards to security risk control measures that can be employed in order to reduce the occurrence of such incidents at shopping centers and the accompanying potential injuries and/or fatalities. Shopping centre armed robbers are professional and would not conduct these robberies without scouting out the shopping centers to establish what they are up against (SAPA, 2009). These criminals look for opportunities and system weaknesses (Anon., 2009). It can be seen from the spate of shopping centre robberies that have taken place that privately hired security officers have appeared to be unable to effectively control or manage the situation. Most are not armed with firearms and do not wear bulletproof vests. As a consequence they have also become the first target of the robbers' violence (in order to immediately neutralize them as any first responder threat) (Papp, 2009). According to the SACSC new security measures are needed to curb the high number of armed robberies at shopping centers in Nigeria. They go on to further state that it is too late to stop armed robbers from attacking when they are already inside a shopping centre (SAPA, 2009). Therefore, this research identifies risks and vulnerabilities, evaluates the current physical protection systems and attempts to make recommendations for the implementation of effective security risk control measures at shopping centers.

Aim of the Study

i) To explore the risks and vulnerabilities at shopping centers that has led to the phenomenon of incessant robberies within and at shopping centers in Port Harcourt

Objectives of the Study

This study explored the phenomenon of shopping centre attacks by addressing the following objectives:

- i) To determine the nature and extent of armed robberies at shopping centers in Port Harcourt
- ii) Identifying the risks and vulnerabilities at shopping centers that have led to the phenomenon of armed robberies attack at shopping centers in Port Harcourt; and
- iii) Identifying and examining the current physical protection systems that is in place at shopping centers in Port Harcourt to assist with the reduction of insecurity at shopping centers.

Research Questions

The following research questions were applied in this research:

- i.) What are the current physical protection systems that are in place at shopping centers in Port Harcourt to assist with the reduction of armed robberies and fire?
- ii.) What are the risks and vulnerabilities at shopping centers that have led to the phenomenon of armed robberies at shopping centers in Port Harcourt?
- iii.) Which security risk control measures should be implemented to address the problem of insecurity at shopping centers in Port Harcourt?

The abovementioned aims and objectives provide for the expansion of knowledge in reference to the phenomenon of armed robberies at shopping centers through the perspectives of the retail staff and customers. The research attempts to assist with recommendations to alleviate the occurrences of armed robberies at shopping centers by means of improvement of security risk control measures.

Theoretical Framework

Ajit and Anu (2012) define retailing as the purchase of different products in bulk quantities from different sources and the sale in bits to the final consumers for consumption. Retail and wholesale trade is considered the largest subsector of the industry and the second largest sector of the Nigerian economy in terms of size. According to the report by the Nigerian financial markets outlook (2013), wholesale and retail trade in 2012 contributed about 20

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percent of the Nigerian gross domestic product (GDP) and 6.4 percent growth in GDP within the third quarter of 2012 is attributed to the sector.

In Nigeria, informal retail business currently exist side by side with the formal retail businesses, however, the informal retail business still remain dominant over the formal retail business within the service sector. Owing to changes in demographic and lifestyle and increasing consumer preferences for wide range of conveniences, processed and packaged as well as nutrition foods, foreign formal retail business have started becoming known and are being attracted into the country (uche, 2011). The entrance of the big retail businesses has associated cost and benefits to the community. It brings about increase in the productivity, innovation, lower cost, varieties of goods and increase in the property tax revenue (carl, 2008), He also noted the costs to include growth in traffic congestion, increase tax incentive and net job loss (carl, 2008). The entrance of big foreign retail shops in a community posses challenges to the existing ones especially the small retail businesses, which lead to some firm to change their strategies as mechanism to survive in the industry, such as changing or improving services quality, improving marketing strategies and improving the information management network (Sean, Noel, Ratikanta, David and Eric 2006). The entrance effect of these big retail businesses can be direct by offering the consumers with lower price and indirect effect by causing the traditional supermarket or other retail businesses to also lower the price due to competitions.

The existence of formal retail shops brings both cost and benefits to the host communities as well which are shared disproportionately among the employee, consumers, other retail shops and government (Elena and Jill, 2007). The implication of this is that, entrance of the big retail shops in a particular community has different effects on different individuals, while some will benefits, some will not and both the benefit and loss are unequal across individuals. How each individual is being affected depends on the ability to compete favorably with the foreign ones.

LITERATURE REVIEW

Historical development of modern shopping mall in Nigeria

The idea of shopping in Nigeria was nothing other than common scenario of our traditional markets until. The influence was so great that it completely changed our thought patterns as regards to our tradition. As seen today our traditional market system is still preserved with little or no modifications but moving with the trend of advancement in this century there is a need to improve our system from what it used to be.

Earlier in Nigeria market activities were scheduled periodically on a market days and the days differ from one community to the other. Over time this system faded because there was need for a day to day business. This is evident in our local markets as seen today. The foreigners who brought civilization into our commercial activities influenced our market system tremendously. This gradual trend led to the emergence of shops, stalls, supermarkets and departmental stores.

Shopping Mall Classification

Over the years, shopping center formats have taken on a confusing array of identities, with names that include such descriptors as Centers, Commons, Crossings, Hybrids, Lifestyle Centers, Malls, Markets, Marts, Mega-Malls, Mixed-Use, Outlets, Parkways, Places, Plazas, Promenades, Shops, Strips, Squares, Super Centers, Town Centers, Urban Retail, Vertical, and Villages. Unfortunately, there is no agreement as to how many distinct types of shopping center formats there really are, or how individual centers should be assigned to the various categories. Adding to this confusion is that shopping centers can be further differentiated by a variety of marketing and management strategies including: Convenience, Entertainment, Ethnicity, Lifestyle, Luxury, Off-Price, Festival, Theme (e.g., home improvement and furniture), Tourist,

Regional Centre

A shopping center typically incorporating one full line department store, a full line discount department store, one or more supermarkets and around 100 or more specialty shops. Total GLAR typically ranges between 30,000 and 50,000 square meters. (www.icsc.org) In some instances, all other characteristics

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being equal, a centre with two full discount department stores, without a department store, can serve as a regional centre.

Key features:

- I. Extensive coverage of a broad range of retail needs (including specialized retail), however, not as exhaustive as major regional centers;
- II. Contain a combination of full line department stores, full line discount department stores, supermarkets, banks, chain and other specialty retailers; as shown in plate i.
- III. Provide a broad range of shopper facilities and amenities.

Mega retail business and small or unorganized retail business

It is noted that retail business have the capacity of offering goods and services at cheaper rate compared to the small retail because they have both the economies of scale and scope over the small one, it is still being criticized Jedidiah (2007). One of the reasons adduced to such criticism is that the increase in the market share of the big retail business which has direct negative consequences on the small ones. Ron, Krizan and John (2009) noted that even with the benefits and other productivity gain derivable from the big retail shop, it is still being criticized owing to the fact that they displace small business.

Ligthelm (2008) noted that there exist benefits derivable from the growth of these formal retail businesses usually lead to a net reduction in the market share of the small businesses. He further noted that the survival mechanism usually adopted by small businesses credit sales which are very difficult or rather impossible in the formal retail businesses

Market Places in Nigeria

Markets have been in existence from the beginning of time, and form an integral part of any Nigerian town or village. Markets as an economic institution play a vital role in the economies of the nation as a whole. The relevance of the market is not only for its role in the economic life of rural and urban communities, but also as a social entity. Through the years, markets have acquired this distinctive social-cultural value (Vagale, 1974). The Nigerian economy is a developing one, as such small-scale retail trades, forms the bulk of the economic activity for the majority of the

populace. Therefore, markets are very important, essential and indispensable. The present development plan of Nigerian government is geared towards industrialization with emphasis on rural area industrial development. The developing nations intend to develop in a sustainable manner and sustainable development is defined as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundland Report, 1987). In line with this, planned and orderly development of the old market places with some kind of permanent structure with a fixed location are now taking over the old places (Uzuegbunam, 1990).

Traditional Market and Modern Shopping Mall in Nigeria

Internationally, in both developed and developing countries, traditional markets continue to co-exist with the modern shopping malls. Each offers its own unique proposition to the consumer. In any emerging market around 10-20% of the retail business is accounted for by the organized sector, while in Nigeria the organized sector is just emerging. The absence of modern shopping malls has been hampering the growth of the organized sector, and it is this need that Persians propose to meet by developing the infrastructure required. The banks in Nigeria have also recognized the emergence of the organized retail sector and are aggressively supporting the development of more shopping malls. In the last couple of years, quite a few retailers have success. This has shown them the power of organized retailing, and they have been putting in place systems and funds to expand across Nigeria. The recent turmoil in the international financial sector has however dampened the real estate sector in Nigeria but expects the situation to improve in the near future.

Empirical Literature

(Oladapo, 2000), conducted a study on the impact of shopping mall development in Nigeria employing Ordinary Least Square (OLS) technique to estimate the multiple regression models. The findings revealed that the development of shopping malls has a positive and significant influence on Nigeria economic growth. The study recommended that the government encourage the

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development of shopping malls and other retail business in the form land provision.

Brown (2013) evaluated the effect of retail business financing on economic growth in Nigeria between 1980 and 2010 the study employed Ordinary Least Square (OLS) method to estimate the multiple regression models. The estimated model results revealed that retail businesses output proxy by wholesale and retail trade output as a component of gross domestic product exert positive and significant impact on economic development proxy real gross domestic product.

Uzuegbunam, (2013) investigated the impact of retail and wholesale enterprises output growth in Nigeria, covering the period1986 to 2011. An augmented growth model was estimated using the ordinary least square (OLS) techniques. The result of the study revealed that retail and wholesale enterprises has a long-run relationship with sectoral output growth in Nigeria. While appraising the growth effect of retail businesses financing in Nigeria, Bello (2013) employed the OLS method in estimating the multiple regression model. The results indicated that retail business output have positive influence on real GDP, a proxy for economic growth. As a result, the study suggested that the government should create conducive environment for retail businesses development in Nigeria.

Biba (2011), in his paper, explored the relationship between retail business development and economic growth in Nigeria. On that ground, he assessed financing options available to retail business in Nigeria and the contribution to economic growth via investment level. The Spearman's Rho correlation test was adopted to find out the relationship between retail business development and investment level. A significant Rho value of 0.643 at 10% was reported at the end of the analysis. This indicated the existence of significant positive relationship between retail business development and economic growth in Nigeria by means of investment level. Descriptive statistics were also employed in the appraisal of certain development indicators. The paper later proposed that accessibility to low interest rate

finances should be provided to retail businesses in other to enhance the growth of Nigerian economy.

In a research conducted by Baker, (2013) on the impact of retail enterprises on the economic growth in Nigeria, for a period of 30 years from 1980 to 2010, using simple OLS method. He found out that retail enterprises and economic growth are positively related. Analyzing empirical assessment of wholesale and enterprises on domestic investment in Nigeria, Ayegusi, (2015) adopted multiple regressions with the use of (OLS) techniques. His empirical result indicates that wholesale and retail enterprises have a positive functional relationship with domestic investment. In a research conducted by Anikeeff, (2014) on Retail enterprises on economic growth in Nigeria, using OLS techniques. He found out that retail enterprises has a positive relationship with economic growth but caution that the overall effect of retail enterprises on economic growth may be significant with respect to Nigeria economic environment, on his analysis he stopped at 2014 while mine has increased to the current year 2016.

Fraser (2015), an empirical analysis between retail enterprises on economic growth of Nigeria, using a bivariate VAR modeling technique. He found evidence of a positive small and medium scale enterprises led growth in Nigeria. He used bivariate VAR modeling techniques in regression analysis while I used OLS techniques that has best statistical attractive properties

Safety a Concern

Shopping centers should be a place to relax, have fun and spend money. However, competition exists everywhere and the retail sector is not excluded. Shopping centers and specially the retail stores must battle the internet, catalogues and television for the customers' attention. The competition becomes even more threatening when customers perceive the shopping centre or the retail store as unsafe. If the individual believes that the shopping centre or retail store is not safe, they may very well decide not to shop there (Hayes, 2007).

According to Hayes (2007) violence within a shopping centre is relatively uncommon, considering the number of customers that pass through a given shopping location, but it does occur, which

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is one of the main factors for concern. These violent acts range from armed robberies to domestic disputes on the property. Environmental cues can also often shape, positively or negatively, a customer's perception of danger in retail spaces. In a customer's perception, the appearance of safety can be as influential as safety itself. For example, loiterers, beggars, abandoned vehicles, graffiti, broken lights, signs of vandalism, dirty or dark restrooms and merchandise-cluttered aisles are amongst other cues that can influence a customer's perception of safety at shopping centers or retail outlets. Redstone (1982) goes on further and states more succinctly that the terms 'safety' and 'security' cover a large variety of elements relating to a shopping centre, starting from the exterior parking areas and going into the public areas of the shopping centre and the merchandising areas of the retail stores. These three areas can be further expounded into characteristics such as fire protection, pilfering and burglary protection, armed robberies, various methods of electronic surveillance, locking devices, emergency cash control, emergency power, communication and handling of demonstrators and/or employee strikers.

Safety and security concerns, from the perspective of retail staff and customers, are amongst the facets that are covered in this study. The researcher spoke intentionally to this characteristic that can stem from violent armed robberies due to there being Reasons for armed robberies at shopping centers Prof Anthony Minnaar, (as cited in Mtshali & Smillie, 2009), postulates a number of reasons for armed robberies at shopping centers. Minnaar believes that criminals are feeling the pinch caused by the economic downturn being experienced in the wake of the global economic meltdown in 2008.4 Like the rest of the population, he states, criminals are also feeling the pinch of tougher times and are therefore looking for softer targets and opportunities to maximize their crime proceeds with the lowest risk involved, hence shopping centre robberies (Mtshali & Smillie, 2009).

A second reason provided by Minnaar is that these criminals are seeking out 'softer targets', due to the 'target hardening' of banks and Cash-in-Transit (C-i-T) vehicles. According to Minnaar, it has come down to the displacement of crime and the finding of other

targets (Mtshali & Smillie, 2009: 3). This view is also supported by Papp (2009: 8), who states that prior to the increase in shopping centre armed robberies, South African banks were specifically being targeted, as well as C-i-T heists were on the increase. The country's banks and C-i-T companies then improved their security and 'target hardened' they and these criminals were forced to diversify and create new ways of obtaining cash. Accordingly, these criminals moved to a 'softer target', namely: shopping centers. Van Maanenberg (1995), in support of this view states that: "The financial industry was once a popular target; the effects of target hardening have displaced the criminality to the retail industry, resulting in an increase of criminal activity both internally and externally". Logically, if the displacement of crime was due to 'target hardening' and better security measures and systems, then adequate securing of shopping centers or 'target hardening' of a shopping centre will be likely to force these armed robbers to other targets.

A further reason for the switch to shopping centers as focus for robbery is that of the virtually unlimited targets in urban areas such as those of Port Harcourt. This factor, may account for the higher incidence of armed robbery at shopping centers. Various other factors also play a role such as materialism, as these armed robberies are very lucrative, with lower risk involved, than say attacking a bank. Also unemployment, poverty and relative deprivation (the gap between an individual's expectation of life and the possibilities of realizing these expectations), are some socio-economic factors that may also contribute to phenomenon (Stewart & Davis, 2003). Another reason for being targeted is that retail employees are merely ordinary citizens who are not equipped or trained to defend themselves against criminals and more specifically armed robbers who readily resort to violence and use of force when executing their robbery attack (Stewart & Davis, 2003).

According to Stewart and Davis (2003), the primary motive for armed robberies at shopping centers is the economic advantage that an individual can obtain from a retail robbery. The financial rewards that are associated with a crime such as this can be an

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important incentive to commit these crimes and can be seen as a facilitating factor in the decisions made by the robbers

Robberies at shopping centers, impact negatively on the growth and development of the economy. More importantly armed robberies endanger the safety and security of its citizens. If these violent armed robberies at shopping centers continue they have the potential for making South Africa an unsafe country to work and live in, as well as economically unviable for people to invest in by reducing investor confidence. Also these armed

Securing a Shopping Centre: Public or Private Space

Shopping centers and the modern retailing world have over the last decade or so changed dramatically. With this change, crime has also adapted. Criminals on both sides of the counter are working harder and smarter. According to Van Maanenberg (1995), computer-based systems have provided for better accounting, auditing and discrepancy reporting results, but the face of crime has changed along with the technological improvements. Due to the practice of displaying goods openly to attract consumers, shopping centers and retail stores suffer from a high incidence of theft and other crimes, both violent or nonviolent, not only from customers, but also from the retail staff (Geason & Wilson, 1992). According to Geason and Wilson (1992), the crime rate at shopping centers increases further just by the mere fact that the site attracts the sort of groups most likely to commit crimes, such as teenagers, alcoholics, drug users and the unemployed. This, however, does not stop here, these criminal incidents not only affect individual retail outlets negatively but also the shopping centre as a whole. When analyzing a shopping centre it will be found that some parts of the site are clearly private spaces and other parts would be regarded as public spaces.

Therefore security arrangements are more than often confused. Usually the set-up is that individual stores have their own security arrangements but are not responsible for common (public) areas in the shopping centre. On the other hand, shopping centre security covers the common areas (Geason & Wilson, 1992). In addition to the 'accepted rule', from a Nigerian perspective, this is for a number of reasons. Firstly, partly because shopping centre

management usually hires private security officers to patrol the premises and police do not seem to be necessary. Secondly, seeing police officers strolling around a shopping centre may give the unsavory impression that they are neglecting their duties and are having a relaxed.

Physical Security Measures in Place at Shopping Centers

Shopping centers face many safety and security concerns. Crime is a major source of loss for both the retailers and the shopping centre as a unit. Accordingly, shopping centers and the individual retail outlets within the shopping centre have implemented an array of security measures in order to protect their employees, customers and merchandise. Some of these security measures are visible to the public and some of them are more clandestine. With this being said, it is not uncommon to experience certain security measures when you enter a retail space such as a shopping centre. Also due to the soaring general and violent crimes and the increasing audacity of criminals, these security measures have over the years increased incrementally, as well as in intensity and sophistication. Due to the focus of this study being armed robbery, the examination of physical security measures implemented at shopping centers will flow from the perspective of preventing armed robberies.

According to Coetzer (2007), armed robberies at shopping centers continue unabated despite the fact that many of the targeted shopping centers use sophisticated electronic CCTV surveillance systems as their primary crime prevention measure. These systems should in fact be providing early warning of such armed robberies. However, this crime continues to grow every year. It is believed that much of the problem lies in achieving an effective integration of security systems and the presentation of images and information to the control room and its staff that can be timorously analyzed for an appropriate and immediate response to be implemented. A suitable and effective security solution will make customers feel secure yet unhindered (in other words not reluctant to enter a shopping centre to do their shopping safely). It requires a balance between visible security measures and customers believing they are safe, as well as between restrictive measures and general freedom of passage.

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The system should also act as a credible deterrent so that would-be criminals avoid the area. The only way to achieve this is by successfully preventing crime or by apprehending and successfully prosecuting criminals if a crime has been committed. Importantly, such a system should also offer centre and security management suitable information upon which crime prevention action can be taken, managed and controlled. Such security information

Safety Measures in Shopping Malls

Fire prevention knows what you can do to prevent a fire in the first place as well as what actions to take in case one happens anyway.

Fire Precaution and Prevention

The key elements of fire precaution policies are;

- i. Building a facility in accordance with the version of the local building code
- ii. Maintaining a facility and conducting you in accordance with the provisions of the fire code. This is based on the occupants and operators of the building being aware of the applicable regulations and advice.

Examples of these includes

- Not exceeding the maximum occupancy within any part of the building.
- ii) Maintaining proper fire exits and proper exit signage (e.g., exit signs pointing to them that can function in a power failure)
- iii) Compliance with electrical codes to prevent overheating and ignition from electrical faults or problems such as poor wire insulation or overloading wiring, conductors, or other fixtures with more electric current than they are rated for.
- iv) Placing and maintaining the correct type of fire extinguishers in easily accessible places. Properly storing and using, hazardous materials that may be needed inside the building for storage or operational requirements (such as solvents in spray booths).
- v) Prohibiting flammable materials in certain areas of the facility.

- vi) Periodically inspecting buildings for violations, issuing Orders to Comply and, potentially, prosecuting or closing buildings that are not in compliance, until the deficiencies are corrected or condemning it in extreme cases.
- vii) Maintaining fire alarm systems for detection and warning of fire.
- viii) Obtaining and maintaining a complete inventory of fire stops.
- ix) Ensuring that spray fireproofing remains undamaged.
- x) Maintaining a high level of training and awareness of occupants and users of the building to avoid obvious mistakes, such as the propping open of fire doors.
- xi) Conduct fire drills at regular intervals throughout the year (Brewer, 2003).

Fire Control

A. Passive Fire Prevention

This has to do with the design of the building itself and the type of materials used to resist fire. Fire safety measures are installed within a building or premises to perform a vital function in protecting life and preventing injury in the event of fire (Brewer, 2003).

These basic fire prevention requirements are;

- i. Path of travel to exit
- ii. Evacuation plan
- iii. Incombustible surface finishes and material

Materials and Methods

The study applied the non-experimental research design and self-administered questionnaire surveys were utilized to obtain the quantitative data. The univariate analysis process was followed to quantitatively analyze and interpret the data collected from the self-administered questionnaire surveys. The collected data was analyzed by an independent statistician. In this study the data analysis is descriptive in nature. This means that the researcher is reporting the distributions or spread of a sample or population across a wide range of variables (Fouche & Bartley, 2011). The data is presented in the form of frequency distributions within tables. The researcher purposely chose the display method of

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tables and frequency distributions because it allows for the easier description, comprehension, interpretation and utilization of the information summarized.

This is necessary in order to answer the research questions and to achieve the aims and objectives of the study and this can be accomplished by way of interpreting the data and the results, that is, to explain and find meaning. The researcher prepared two different questionnaires. A questionnaire was prepared for each group; one for the retail employees at shopping centers and one for the customers at shopping centers. The questionnaire survey was handed out at 3 shopping centers in Port Harcourt. Twentyfour questionnaires were administered to the retail employees and twenty questionnaires were administered to the customers per shopping centre. This yielded a total of seventy two retail employees and Sixty customers that had questionnaires handed to them. From the sample of retail employees, solely of people working at the shopping centers (that gave approval to undertake the research and administer the survey questionnaire at these respondents participated in the selfsites), a total of 60 administered survey out of an intended target of 72, giving a response rate of 84.2 percent. From the sample of customers who were visiting the shopping centre, a total of 46 responded to the self-administered questionnaire survey out of an intended target of 60, giving a response rate of 76.0 percent.

In reference to the research findings above and specifically the subject of security guards, McDermott (2008) states that security guards should not have weapons and believes that having armed security guards would simply increase the danger to the retail staff and customers as crime patterns show that the size and weaponry of armed gangs just escalates in proportion to your level of armed security. Retail stores are increasingly being seen as 'soft targets' for violent crimes and specifically armed robberies and innocent retail staff and customers are often caught in the cross fire. While the larger retail stores have tended to contract security guards at their front entrances, these security guards are not specifically trained to manage violent situations but rather to deter would be shoplifters and petty criminals. Even those shopping centers that have contracted outsourced security companies, have very little

chance of averting an armed robbery as these gangs usually work in large numbers and overpower existing security guards. This is yet another example of why employing intelligent technology is far more efficient and safer than using the old 'guns and guards' method.

Retailers in some instances have installed Closed Circuit Television (CCTV) cameras to help with surveillance, as well as sophisticated alarm systems (Anderson, 2008). While these play a valuable role, a shopping centre needs to approach its security in a holistic manner and they need to ensure all security staff complies with minimum training standards.

Result

The summary of the research findings are grounded on the research participant's responses to the self-administered questionnaire surveys. There were two self-administered questionnaires utilized for this study, that is, one questionnaire for the retail employees and one questionnaire for the customers. The researcher will discuss findings from the responses received from retail employees and the customers in the sections to follow.

Findings from Retail Employees

The following findings materialized from the self-administered questionnaire responses provided by the retail employees.

Findings in reference to the general experience at a shopping centre

Most of the research participants felt that the shopping centres are a safe place to work in reference to the security measures that are used to reduce crimes. However, almost all the research participants still took precautionary measures to avoid becoming a victim of crimes at the shopping centre.

The precautionary measures employed by the research participants varied. It was found that most of the precautionary measures engaged in had to do with the personal behavior of the respondent. No link was made to the safety and security measures that are provided in terms of the physical protection system in place at the shopping centre to protect them.

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Most of the respondents indicated that they would not leave their job if the shopping centre is the target of a violent criminal incident.

The responses received in reference to the effectiveness of security measures at the shopping centers were mixed. The majority stated that the measures were effective; a large percentage indicated that they were unsure; and a significant percentage stipulated that the measures were not effective. The respondents also provided a vast array of reasons for their responses. However, many of the responses received by the 'Unsure' group overlapped with and can be linked to the reasons provided for why the security measures at the shopping centre were not effective.

Just over half the respondents were informed of the security measures in place at the shopping centre by their superiors. The respondents knew of many security measures that are in place at the shopping centre. The majority of the respondents indicated that there was a control room onsite and that there were control room operators working on shift monitoring and recording footage twenty-four hours a day and seven days a week at the shopping centre. Most of the research participants were unsure if records are kept of all criminal and other incidents that occur at the shopping centre.

A significant percentage of respondents knew of the existence of an emergency procedures/disaster preparedness plan. The majority of respondents were 'unsure' if such a plan(s) exists at the shopping centre. Many of the respondents who were aware of the emergency procedures/disaster preparedness plan indicated that they were tested. More than half of the research participants were unsure of the existence of a security plan at the shopping centre. Of those respondents who knew of the security plan, the majority stated that they have familiarized themselves with the content of the plan and that the plan is noticeably displayed. The research participants knew of various types of crimes that were occurring at the shopping centers. These crimes ranged from some of the more 'petty crimes' such as pick pocketing to the more violent crimes such as armed robbery.

As indicated by the research participants, the top three most-atrisk assets at the shopping centre are: merchandise, cash and vehicles in the car park/parking

CONCLUSION

In this chapter, all the responses received from the research participants, through the self-administered questionnaires, were interpreted and analyzed. The data was numerically analyzed according to frequencies and percentages. The researcher went on to further analyze and interpret the information received by applying and linking literature to the empirical findings of the study. Shopping centre armed robberies in Nigeria was explored through the first-hand experiences of the retail staff and customers and findings were presented. Shopping malls are fundamentally large complex buildings occupied by considerable numbers of the general public and shop staff. These buildings must be planned to be safe and, in the event of an emergency or fire, allow for fast and safe evacuation from the building by all its occupants. In the design of the practical issues, fire safety is one of the most important and complex considerations. Architects play a very vital role in ensuring that fire safety measures are achieved in the design of shopping malls. Based on the findings, few of the shopping malls have the basic fire safety equipment and strategies. In Nigeria, the problem of maintenance of these equipment if available is another key issue.

This research helps to outline the fire safety problems in shopping malls and how to tackle the problems with a successful design. Most architects lay more emphasis on special arrangements and aesthetics, and neglecting the fire safety measures which are paramount in ensuring a safe shopping environment.

The researcher has outlined the nature and extent of armed robberies at shopping centers in Port Harcourt. The researcher went further and examined the current physical protection systems in place at shopping centers and thereafter provided recommendations for improving security measures and reducing armed robberies at shopping centers. Upon exploration it has been found that armed robberies at shopping centers is a complex phenomenon and are also dangerous and debilitating. The seriousness of armed robberies at shopping centers and the

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impact on the retail industry and customers cannot be disregarded. The findings and recommendations took into consideration the literature study and the responses received from the participants for the purpose of reliability and validity. Therefore the findings and recommendations made in the research can assist the retail industry in exploring a means to improving security measures at shopping centers. It is also an expectation that this research study will further stimulate interest and further research into the phenomenon of armed robberies at shopping centre

RECOMMENDATION

In other to achieve safe shopping environments, these factors must be taken in consideration.

- I. Building in accordance with the provisions of the fire code (National Building Code).
- II. Periodically inspecting buildings for violations, issuing Orders to Comply and, potentially, prosecuting or closing buildings that are not in compliance, until the deficiencies are corrected or condemning it in extreme cases.
- III. Maintaining proper fire exits and proper exit signage (e.g., exit signs pointing to them that can function in a power failure)
- IV. Compliance with electrical codes to prevent overheating and ignition from electrical faults or problems such as poor wire insulation or overloading wiring, conductors, or other fixtures with more electric current than they are rated for.
- V. Properly storing and using, hazardous materials that may be needed inside the building for storage or operational requirements (such as solvents in spray booths).
- VI. Evacuation plan should be placed in strategic places of the shopping mall in other to assist shoppers and occupants in case of emergency.

Contribution to Knowledge

- I. The study identified the major causes (Electrical and Mechanical) of fire outbreaks in shopping malls
- II. The study highlighted the passive and active measures of controlling the fire outbreaks in shopping malls.

The research demonstrated the use of these passive and active measures in providing the best layout and evacuation strategies in saving lives and properties Accurately record details of an armed robbery: it is imperative for a number of reasons such as future prosecutions, sharing and learning;

- 1. Learn from past events: these can inform relevant partnerships that need to be formed, programmes and security measures;
- 2. One size fits all does not work: shopping centers need to establish their own security system according to their unique setting;
- 3. Call in experts: they can provide valuable input in their related fields;
- 4. Become members and join organizations that specialize in preventing crime in the retail industry: one such unit is the Consumer Goods Risk Initiative (CGRI) with the Consumer Goods Council of South Africa (CGCSA). They developed a secure cash distribution system for shopping centers in Johannesburg designed to decrease cash-in-transit robberies. As part of the system, cash is transported

Recommendations for Further Research

Grounded upon the entity of the present study the following recommendations were identified as further research themes:

- A qualitative exploration of armed robberies at shopping centers from the perspective of senior management;
- ii. An in-depth analysis into the impact on victims of armed robberies at shopping centers;
- iii. An analysis of the recruitment criteria and training of private security guards in reference
 - to armed Robberies at shopping centers;
- iv) An explorative study on the legal and evidentiary aspects attached to armed robberies at shopping centre;
- v) An analysis into the emergency and incident handling procedures at shopping centers;
- vi) An exploration of the effectiveness of security measures utilized in parking garages at shopping centers; and
- vii) The level of training received by control room operators in order to be effective at their jobs.

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