EXPLORING THE ARCHITECTURAL QUALITIES OF SHOPPING MALLS AND TRADITIONAL MARKETS IN THE DESIGN OF A HYBRID MARKET IN EKO ATLANTIC CITY, LAGOS, NIGERIA

By

CHINEDU CHARLES OHAMBELE

DEPARTMENT OF ARCHITECTURE

AHMADU BELLO UNIVERSITY, ZARIA

NIGERIA

AUGUST, 2019

EXPLORING THE ARCHITECTURAL QUALITIES OF SHOPPING MALLS AND TRADITIONAL MARKETS IN THE DESIGN OF A HYBRID MARKET IN EKO ATLANTIC CITY, LAGOS, NIGERIA

By

Chinedu Charles OHAMBELE, B.Sc. Architecture (ZARIA)

P15EVAT8052

A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD

OF MASTER OF SCIENCE IN ARCHITECTURE

DEPARTMENT OF ARCHITECTURE,

FACULTY OF ENVIRONMENTAL DESIGN

AHMADU BELLO UNIVERSITY, ZARIA

NIGERIA

AUGUST, 2019

DECLARATION

I declare that the work in this thesis entitled "Exploring the Architectural Qualities of Shopping Malls and Traditional Markets in the Design of a Hybrid Market for Eko Atlantic City, Lagos, Nigeria" has been performed by me in the Department of Architecture. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at this or any other Institution.

_____   _____   _____

Ohambele Chinedu Charles   Signature   Date

CERTIFICATION

The thesis **Exploring the Architectural Qualities of Shopping Malls and Traditional Markets in the Design of a Hybrid Market in Eko Atlantic City, Lagos, Nigeria** by Charles Chinedu OHAMBELE meets the regulations governing the award of the degree of Master of Science in Architecture of Ahmadu Bello University Zaria and is approved for its' contribution to knowledge and literary presentation.

_____ _____ _____

Dr. J.J. Maina

Chairman, Supervisory Committee   Signature   Date

_____ _____ _____

Dr. A.E.O. Eneh

Member, Supervisory Committee   Signature   Date

_____ _____ _____

Dr. A.S. Salisu

Head of Department   Signature   Date

_____ _____ _____

Prof. Sani Abdullahi R.

Dean, School of Post-Graduate Studies   Signature   Date

ACKNOWLEDGEMENT

To my mother: Mrs. Anthonia Ohambele

The fire in my bones ignites, whenever it remembers the early years. That sunny day you walked me to school; that day spirits changed bodies.

To myself, we finally walked on water, but we still have nautical miles ahead.

To my amazing and ever diligent supervisors Dr. J.J. Maina and Dr. A.E.O. Eneh, who have been my backbone throughout this tedious but rewarding research year. I say thank you for all the sacrifices. Thank you for forgiving my ignorance. Thank you because you have sown a seed through your efforts; and I pray you will be alive to reap its harvest. To my roommates and brothers (Mal. Abdul, Mr. Uka, Johnson Adedire, Ayokunle Olorundare and Ola Pulver), who did not frustrate my efforts; thank you for the food, warmth, encouragements and the precepts. I pray you all attain your highest aspirations.

To my brothers who have been a spiritual inspiration to me, Aliough Zahemen, Hyelnaya Midala, Romanus Jideofor, Salam Samuel, John Obute, Paul Yohanna, Saratu Ahmed and Tor Shiekuma. To my ever-committed spiritual parents Pharm and Mrs. Yonni Apeji, I am grateful to have met you all in this stage of my life. I know how God has used you all to soften my conscience; Thank you and God bless you. To my many friends that I keep making; the friends that make me earn the title of "professional friend" (Chinnan Daful, Ojo Cecilia, Samira, Abel Panni Audu, Hauwa Musa (bae), Stephen Haggai, Adebiyi Gbenga, Ojochide Abu, Akinnuoye Modupe, Amal Attah, Anita Banki Kevin, Zarma Deborah,) and even those whose friendships I have lost, you are still in my heart. Thank you for the moments I shared with you all; they remind me of how fleeting the days of man is on earth: here for a while and gone like a mist.

To one of my peculiar friend and thesis gang-member: Aderonke Adeniran, you are an amazing lady. You always have a laugh lingering at the side of your lips. Confident, smart, hardworking and troublesome; very few ladies have all these qualities in one body. I pray God keeps you safe and saved even on that last day. I pray we would be able to do some gang work together sometime in the future: the glory of this world is fleeting, a mirage; grandiose till it is rolled away.

To my ilmihouse crew Anita Kevin, Alaba Mustapha, Ahmad Almustapha, Faeez Alto, Ochai Ogaba, Aaron, frank, Mallam Lawal and the godmother Aisha Saidu Bala. I thank God I met you all in 2016, you have given me a reason to be sensational. I admire all your courage and commitment, only God knows how you all maintain motivation to keep on keeping on. I pray we get to celebrate a silver jubilee together and brighter years ahead for us all. And to all those who are and who have become family over the years: Chinwe Onyekwere, my aunt Ugoeze Okwuonu Onyekwere, Fatima Onyibe, Lawretta Onyibe, Innocent Onyibe, Tani Onyibe, Uche Onyibe, Prof. and Mrs. Onyibe, Olivia Enyinnaya, and all my extended family. No photograph can capture us all neither can my pen. Thank you for all the empathy you share with me. If I omitted you, whatever your relationship

to me is, I want you to know print is limited, but love isn't. I love you to the end of the world.

ABSTRACT

This study highlights the mutual architectural qualities existent in both traditional markets and shopping malls to determine which of these is considered among patrons as important and why. This study sheds more light on why there seem to be a patronage shift from traditional markets to malls as indicated in literature; and which of these architectural qualities attributed to each is considered as a cause of such traction in Lagos State, Nigeria. Quantitative and qualitative analysis through structured questionnaire and behavioural mapping were used respectively, 58 questionnaires were analysed using SPSS v. 21 for means, standard deviations and ratings. It indicated that "hustle and bustle" (30.6%) and "ambience" (25.6%) were presently the key incentives for visiting both traditional markets and shopping malls respectively. Results were rated on a Likert scale of 1 to 5, which showed that proper drainage (4.60) and waste disposal (4.52) were two most important qualities for the success of traditional markets, while the presence of adequate parking areas (4.60) and obvious ingress/egress (4.52) were opined for malls. Further results implied that traditional markets (in Lagos) are still patronized not necessarily for the goods they afford, rather for the buzzling nature. While for shopping malls, the ambience characterized by its orderly organization is an attraction to patrons. This implies that patrons in Lagos are bipolar in their patronage; that they satisfy their polemical desires by maintaining patronage of both. In addition, in order to maximize the successes of both shopping malls and traditional markets the above lacking architectural qualities should be given paramount consideration than any other in the design of a hybrid market in Lagos state.

TABLE OF CONTENT

List of Figures

List of Tables

List of Plates

CHAPTER ONE

1.0   INTRODUCTION

This preamble chapter is a synopsis of the entire dissertation to be undertaken. It provides the basis upon which the entire purpose of this study is built. As it encapsulates the main idea and defines the purpose of this research, by defining the scope of work expected. The use of comparative analysis of contemporary shopping malls and sturdy traditional market prototypes will form the basis of the entire research. As the term shopping mall may connote a different meaning to a variety of persons; its application within this research refers to the contemporary, commercial spaces that have gained wide prominence in major urban cities in Nigeria. Its definition is further elaborated within the literature review of this work. Traditional market is the commonest form of market in Nigeria, it bears the same meaning as it conveys within this document.

Traditional markets in Nigeria are ubiquitous and interject almost every major highway possible. They are an integral part of society's social lifeline. Their necessity in the micro and macro-economy makes them almost indispensable. They grow out of necessity and form indiscriminately wherever they can bud. Usually, this makes their environment unsuitable to meet or accommodate their future demands. They over time become a limitation to a growing urban centre. Shopping malls on the other hand, have become the new catch as they provide a better looking, more social and appealing space for patrons. Due to their contemporary approach and supplementary facilities otherwise not obtained in traditional markets, they have attracted a very large portion of the population that seek respite from the eye-sore the traditional markets often portray. Nevertheless, they are not without limitations. Traditional markets ought to be an epitome of an egalitarian environment that accommodates and permits for all sections and classes of individuals to

collaborate and interact on a social basis. Shopping malls have been unable to infuse this integral quality inherently. Thus, they only and usually appeal to a middle- or higher-class population.

This study wishes to take a deeper peer into Lagos city which is almost eponymous with markets and see how its populace have reacted to the upsurge of shopping malls and their corresponding reactions towards traditional markets.

1.1 Background to the Study

From time immemorial, the act of trading a commodity at hand for something needed and selling the unneeded for the needful has been an old act. The necessity to engage in barter for goods or services has engendered the need for a muster point where stakeholders meet at an agreed time and usually within a specific interval (Istijabatul, Setioko, & Pradoto, 2016). These muster points are called markets. Market is therefore an infrastructure, accommodating individuals who converge for the purpose of transacting business (Obaje, 2013).

Obaje (2013), infers that markets could be categorized into open-air markets and purpose-built markets. Open air markets do not exist during off-hours; they are only temporary structures purposely constructed to be used during commercial hours during the day, as such traders often carry home their wares. But for the purpose-built markets, they have been designed and are recognised by the urban regulatory bodies and as such are licensed to have physical structures within a permanent location. The open markets are prevalent in rural areas while the purpose-built are prevalent in urban or semi-urban areas. Other categories of markets exist as explained by other authors; Tomori, (1997) categorizes them into regional shopping centres; conventional/modern markets; traditional and neighbourhood markets. But these categorizations are based on, physical, infrastructural and behavioural properties; as observed by these authors.

It is common practice with various authors; when highlighting core components of a city to seldom exempt the place of the market (Istijabatul et al, 2016; Kawet & Shiratake, 2006; Beattie, 2008). According to Kawet & Shiratake (2006), the original concept of a market is characterised by a location; variety of merchandise to be sold which affords face-to-face transactions. In their view, these has great ties with history; culture; social interaction and most importantly---in my view---the city. Markets are an indicator of the production, consumption and distribution of certain goods (Istijabatul et al, 2016). Thus, it acts as a social and commercial centre as well as a venue for people seeking adventure. They also provide realtime information as to the cultural character of its locals or neighbours, and its physical character possesses imprints of its antecedent history.

Markets have maintained relevance since the historic timeline of urban centres, but the necessary growth of these cities according to Beattie (2008), have unsettled the markets identity due to the trade and traffic of goods from outside the markets. Its existence and inherent social qualities are threatened by activities around it, which also delimits it's functionality. Thus, in order to meet up with the demand of the growing populace, markets have expanded chaotically occupying every bit of space it can obtain within its boundaries, consequently overwhelming management. This has in effect resulted to its typical tardy character, dilapidation of its structures and its subservience to intermittent colossal fire spells; as it is usually crammed up with disregard to easements or little allowance for navigation. These deterrents discourage willing patrons from undertaking a journey to the market. These challenges affect both rural and urban markets. The current state of Nigerian urban markets---being a core component of emerging urban centres---are in the form of similar adjoining leasable shops within a chaotic organic growth plan (Balogun, 2011). These are usually located within a mixed-use residential area or a designed cluster of commercial shops termed "ultra-modern markets". The mixed-use

type evolved due to the need to ameliorate individual's income (Omofonmwan, 2013); as a result doesn't display intent as regards the provision of facilities, especially social venues. But quite often markets existence comes with a number of demerits; such as; aisles meant for circulation are usually obstructed by unplanned kiosks, and the inadequacy of the interior spaces has forced the shop owners to display temporarily their wares on the pedestrian corridor (Farinmade & Anyakora, 2012). All these efforts by shop owners or sellers is in a bid to maximize the limited number of customers that patronize them. Although ultra-modern markets aim at appropriating and segmenting spaces to different sections of traders, their effort have not been applauded as, the traders dread occupying these new markets because they are often located way outside the town which in their opinion is a deterrent to customers who would prefer to patronize any alternative within the city. In contemporary "ultra-modern markets", structures specially designed for commercial purposes comply with planning authority's requirements, but their creation is an inherent disadvantage unless constructed on the same site as the former. This in itself also poses some major challenge if the cost of renting the renovated stalls is too exorbitant for traders. Although, efforts by governments in constructing new markets away from the city centre has been applauded with cynicism. The refusal of traders to occupy the new market against the dilapidated and original ones have proved futile. As they are paranoid of the possibility of lower customer patronage as observed in other similar prototypes.

So, for the purpose of this research, we would rather innovate a better approach to enhance present markets; as location matters in markets, than translocate the markets elsewhere and have new canvas to appropriate design objectives. The challenge thus, is to innovate through design how these demerits can be mitigated, as these nerve-wrecking experience

dissuades the government; its patrons; administrators; city; users and sellers alike; and these also impedes the developmental prospects of its host community.

1.2 Problem Statement

Very little research exists on fusing traditional market and shopping malls' architectural qualities, as this is an impending demand of contemporary middle-class population (Deolu, 2016). There is also a perceived user-culture as it regards traditional and modern markets and how both relates to the use of space, the specifics of which are uncertain in the Lagos context (Gross, 2002).

1.3 Aim and Objectives

This research seeks to investigate architectural qualities that can be employed in the design of a hybrid market which fuses the best qualities of traditional market and shopping malls for Eko Atlantic City Lagos, Nigeria.

Objectives:

With this aim at fore, the following objectives hope to be realized:

a. To investigate from field and literature, the qualities with architectural relevance that traditional and contemporary market form (malls) possess.

b. To outline the level of application or limitation of these qualities in the design of a hybrid market.

c. To demonstrate through design the implication of adopting this alternative within its local context as an option for a hybrid market design in Eko Atlantic City, Lagos, Nigeria.

1.4 Scope of the Study

The average Nigerian markets, in feature and character are almost the same from many stances, and as Nigerian markets are quite too large and too many to analyse altogether,

this research would be limited to some that are located within the hub of the economic epicentre of Nigeria. For this reason, the research would be limited strictly to the traditional markets and shopping malls majorly patronized by the middle-class in Lagos Nigeria.

1.5 Research Question

Answers to the following questions would be sought through this research. Questions such as:

a. What aspects of traditional markets and shopping malls do patrons like?

b. What architectural features of traditional markets and shopping malls if available would better enhance the patronage of these?

1.6 Justification for the Study

Presently, the ubiquitous appearances of new forms of markets (shopping malls) that have attracted a large section of society against the original traditional forms (traditional market) have been surprising. Research has shown that the growing patronage of shopping malls is related to the preferred environment it affords. Likewise, traditional markets have been shown to be sturdy while facing the stiff competition from contemporary market typologies in the form of shopping malls. In another study in Indonesia, they observed that although the trend of modern retailing outlets is mushrooming the city, the research indicated that traditional markets still pose a stiff competition to these large retail stores. This is due to the fact that they focus on fresh food goods, while the modern markets focus more on processed goods and non-food goods. However, according to the author, if traditional markets do not continue to innovate ways to maintain consistent patronage, they may fall for the consistently upgrading modern market structure (Suryadamar, Poesoro, Budiyatu, Akhmadi, & Rosfadhila, 2007). An excerpt from the United Kingdom's (UK) industry and policy reports asserts that, the UK

24

public prefer to shop in the convenience of corporate retailers over the traditional municipally-run markets (traditional markets)… so, traditional markets should either adapt or die (Gonzalez & Dawson, 2015). They observed that retail gentrification (which is the process where commerce that once served a low-income population is transformed/replaced to serve a population of a wealthier category) is taking place in the UK, although it is seen as an acceptable innovation, as it replaces shabby environments with a more admirable one. In African cities however, traditional markets would still maintain relevance as they still form the structure of its society. As such fusing these two; to suit the modern and traditional desires of its future citizens is imperative. Also, a hybrid markets is deemed a solution for the future; it is best suited for a futuristic city. Lagos is the foremost city in Nigeria which has initiated its ambition to create a future city.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This research seeks to highlight the architectural qualities available to a traditional and modern market (mall) prototype and highlight their hierarchy in importance where possible. This section is primarily devoted to searching available literature, in order to discover the extent of knowledge that has been; which would form the basis for this argument. So, the search would try to highlight every aspect of both market typologies; their component within a Nigerian or African context; obtain information as it regards the variables that influence the market syntax and structure; the users, individual qualities; the challenges and successes of employed strategies and anyother available factors that could be influential to the market's functionality.

The first section outlines the history of markets in literature, the nature and role of markets in the rural and urban sphere of the Nigerian society. By defining the various types and categories of markets; its context and cultural attachments to its communities, and juxtaposing the different characters based on locations of markets around Nigeria. Also, it gives a background look into Lagos state and the evolution of its markets through its urbanization phases.

The preceding step is to identify related works of sundry authors, and determine how much work they have done as related to the area of markets, its growth, the social interaction and roles of markets within its host community. Literature would be assessed to determine the qualities of architectural relevance that influences the patronage of these prototypes.

The third section would be defining the information obtained from literature. In this section, the necessary factors that would aide in formulating the prefered methodology would be derived.

2.2 Concept of Market

The concept of markets claim to have begun at the onset of humans sedentary period. Man began to cultivate and rear animals for his personal livelihood and refrain from his nomadic lifestyle (Sagada, 2016). This lifestyle supported the creation of communities and permanent residences, and fortresses against attack in order to further communal progress. (Roth, 2010). Due to this subsistence lifestyle, the production of agricultural excess was inevitable. Thus, as civilization became more complex, superceding the rudimentary needs of the ancient man to needs requiring expertise; trading activities within the society became a necessity (Ibrahim, 2012). In West Africa, markets were opined to have been developed initially by craftsmen. As their trade grew, rather than sell in their homes they decided to pick out a space where they can meet and advertise their wares (Hosea, 2014; Mansur, 2004). They originally performed trade by barter for their wares before the intrusion of colonialism and the introduction of commercial currencies. Inter-city and international trade was fostered by the creation of railways through these major towns which picked up excess goods available in one section to another of the amalgamated region and vice versa (Alkali, 1991; Musa, 1999). Markets were integral sections of the West African society and the roles it played in these society were apparent. But we would discuss this later in this text, but for now lets elaborate the concept of markets from available literature.

Markets may be referred to as a tangible or intangible entity (Denegri-Knott, 2007). The intangible may be more predominant in contemporary times with the continuous

innovative application of available technologies like the internet, which fosters virtual trade. But the market to be discussed in this dissertation is of the tangible nature. Market is a common terminology used to identify the medium through which goods and services are exchanged to the terminal consumer (Lipsey, 1963). Others have defined it as an authorized public gathering of buyers and sellers meeting at a place at a defined time (Omole, 2002). Also, it has been defined as, a pre-determined site with committed days where buyers and sellers meet to exchange goods and services amongst themselves and conduct other social activities that also compliments the economic transactions (Good, 1976). Other authors have asserted that markets are places in which things are bought and sold within which both buyers and sellers are having free intercourse with one another. (Dewett, 2010)

These authors have recognized markets as an infrastructural entity that is not necessarily of physical but an instrument to effect the act of trade. But they perceive that markets should have a geographic location on earth, and also, although not necessarily, have days at which the market is operative and conducting commercial activities. Other authors have insisted that the role of market in society is inevitable, even where self-sufficiency is assumed to be effective, the need to exchange goods or services for others is inevitable; as farms cannot provide all essentials required (Ayittey, 1991). Thus, there must be a confluence of buyers with sellers who wish to sell off the unnecessary to augment for that which would be needed, and doing so at any prefered location.

The social responsibility is scarcely misplaced in their definitions of markets. Bohannan, (1964) asserts that, asides the commercial relevance of the West African markets, they served as centres of entertainment. They hosted dancers; musicians and other artists, giving them a free stage to showcase their skills. According to Good's (1976), it serves as an information centre, where illiterate and rural dwellers come to get informed. For

some others their definition of a market place is striking. Beattie, (2008) was found quoting "Bahktin" who terms markets as "a centre of all that is unofficial", as it always remained with the people. He insinuates that markets can and should never lose their place in the activities of people. It ought to carry some attribute of life and communism as it relates to society's conduct. It should offer visitors a glimpse of the local lifestyle (Khalilah, Zumahiran, & Harun, 2016).

As West Africa is characterised by its robust social liveliness, the social attribute of markets hardly goes unnoticed, and where considered dormant or docile, it doesn't fulfil the holistic role of the typical african market place. As is a common saying "people define places, and not the other way round." Thus, African markets have a peculiar character that differentates them from other markets around the world. When this character is lost, the essence of the marekt is lost. In the African setting, markets served religious functions. Markets in very local settings serve as venues for public religious sacrifices (Aliu, 2014). Bohannan, (1964) affirms this point, by saying shrines are usually associated in the consecration of markets. He further elaborated that, the need for these rites were in order to maintain peace and calm within the markets; as these sacrificial rites would help in obtaining "supernatural sanctions" for the constituted political authorities by the spiritual deities. Where this rite is not undertaken, it is believed that the commercial activities among the people might not be conducted effectively. To this effect, the political authorities--usually the traditional monarchs--ensures the pacification of these deities. As evident and dominating as the economic and social aspects of a typical west african market is, if its religious attachment isn't acknowledged it will fail as an entity of the African society. The efficient administration of the core activities would be impeded.. Additionally, in some Islamic states in West Africa, Babangida, (2015) asserts that, location of markets is not arbitrary. Markets are strategically placed within a cocus that

contains the heighest cultural institutions such as the palace; mosque and museum; clearly dictating it as an integral cultural entity of their society. Nevertheless, in contemporary markets, these acts may have eroded away with the coming of religion and urbanization

Basically a market is any scenario where demand meets supply and transaction is realised. Not minding the material to be exchanged; it could be financed by form of barter or currency. The above definition goes for any particular instance where the word market is to be used. But for the case of an original rural West African market; The definition is limited to a physical location recommended by a pacified deity; that congregates buyers and sellers within a predetermined time period, with the aim of exchanging goods or services in an entropic mix of social activities. Fusing these broad characters particularly to a market is quite peculiar in an african setting. West African markets have very strong attachments to their culture as much as they do any part of their society.

But this definition is challenged by the erosive influx of civilization in urban centres in Nigerian cities. This consistent deviation of contemporary urbanists from their inherent culture to adopt the perceived urban culture that comes with proper modernization seems inevitable. Although, I believe the definition of contemporary markets would be different due to the urbanization which is drastically changing its inherent character.

2.3 Traditional Markets

Traditional markets or public markets as it is referred to, is a city square where traders set up open stalls and buyers browse the merchandise (Alfa, Lotje, & Yoshiharu, 2006). It is of ancient origin, and its structures are temporary and they only come alive on selected market days, but however, others exist that run everyday of the week. Traditional market illustrated by (Shakur, Hafiz, & Cahantimur, 2012) is said to contribute greatly to the

economy if it possesses strong historical background and maintains such ties. The roles of a traditional/public market were outlined below:

> Most important, public markets must have public goals. Public goals give a defined civic purpose to the market activity. Typically, these goals have included attracting shoppers to a downtown or neighbourhood commercial district, providing affordable retailing opportunities to small businesses, preserving farming or farmland in the region, activating an underused public space, or displacing an undesirable use of the public space.
>
> Second, public markets are/create a public space in a community. This is the visible aspect of a market---the creation of an inviting, safe, and lively place that attracts a wide range of people. As an effective place where people mix, public markets can become the heart and soul of a community, its common ground, a place where people interact easily, and a setting where other community activities take place.
>
> Finally, public markets are made up of locally owned, independent business operated by their owners, unlike the ubiquitous franchise that dominate retailing today. This helps account for the local flavour of public markets and the uniqueness of the shopping experience. Public markets consciously seek out local entrepreneurs and businesses and therefore offer an alternative to common retail practices. (The Ford Foundation, 2003).

According to this foundation, the first goal of public markets is to contribute in its civic duties. That is, it owes the society a social responsibility of engaging or enhancing the social life or vitality of the urban space and its peoples. The market is an effective instrument in enhancing society either by engaging its persons or by activating idle or unprofitable spaces for something better. It supports local prospective small businesses,

31

by realising their aspirations. The market space ought to be the stage for community socialization. It sets an environment that should foster better human relations and communal communication. It should be the safe heaven for the public that is easily accessible and welcoming. It also ought to be a location that provokes ease, comfort, serenity and communality. Traditional markets is a plethora of local content. Its sustenance and drive ought to be sponsored by locals contrary to the high-taste mega retail outlets in city centres.

All these characteristics give very defined information as to the important roles the traditional market institution contributes to society. Prior to the upsurge of large chain retail outlets, markets conveniently gave this contributions to society. The encroachment of modernization; which comes with these trendy marts as perks, is an inevitable trend in contemporary cities. But its speedy displacement of originally instituted establishments may be too quick and eerie. According to Dowall (1993), other factors that make this establishments quite admirable is its competitiveness, where there is no fixed price and the price dynamics; as this is responsive to both the buyer and seller at all times. The price of goods are not instituted by any government; it all depends on the bargaining power of both seller and buyer. This may be part of the reasons traditional markets still attract a wide range of patrons.

Based on the aforementioned market classes, traditional markets in lagos fall into only one of these categories, which is the structure-wise class. There are 425 traditional markets in Lagos state comprised of lock-up shops and stalls; also characterised by traders operating on open grounds around these markets (Komolafe, 2016). It can be sub-classified under the permanent market spaces because it retains its location without any intermittent disruption to activities.

2.4 Place of Traditional Markets in Nigerian Society

In North America, according to Ihewuokwu (2017), there is an aspect of social living that binds every American irrespective of race, ambitions, aspirations or perspective; which is American football; which is referred to as the "American metaphor". Accordingly, to make same assertion in Nigeria, the first item that comes to mind would be soccer (football). As "the marketplace is an appropriate metaphor for understanding the multiculturality of modern Nigeria… it was the centre of commerce, the local town hall, and the main social centre all rolled into one." He went further to claim that this marketplace was what created the modern Nigerian middle class. Along the major streets of any Nigerian city it is common to be interjected by a traditional market. In order to get a feel of the lifestyle of the locality, the marketplace is an archetypal location.

Markets in Nigeria usually follow one particular paradigm of formation. Many are poorly planned or not planned at all (Adeyinka et al, 2016). They metamorphose in a haphazard manner and extend towards main roads, and usually provide no space for parking hence distabilizing the flow of traffic, which in turn defaces the urban cityscape. Usually they impede the use of adjoining road networks that lead to the market due to the high level of traffic (Awoniyi, 2016). For some societies rural in character, traditional/public market are a common site. But within mega city centres in places like Lagos, Port-Harcourt, Abuja etcetra; the traditional markets on the contrary also exist, but sparingly distributed within the city or are clustered at the outskirts of the main town. The scarcely distributed spots of markets that exist within mega cities look out of place. The city have grown around these ancient institutions which have also maintained relevance through the city's urbanization (Beattie, 2008). Management problems overwhelm the traditional markets efficiency due to the rapid growth of urban cities (Fadamiro, 2003), thus an encroachment of open spaces is one of its many problems associated with this growth. Efroymson et al

(2009) indicates that although traditional markets may be messy and noisy, they, compared to modern markets afford human interactions by being lively and friendly.

Traditional markets in modern Nigerian societies are facing very stiff competition from the supermarkets that deal in processed and branded retail version of most of what the traditional markets are selling. And they seem to be gaining more patronage as their façades implore customers as a better alternative to visiting the deplorable structures that exist in the traditional markets (Ogeah & Omofonmwan, 2013). Even though this trend seems to dominate the trading sphere, others are of the opinion that the informal traditional market structure would still be competitive in this era (Oxford Business Group, 2017). They believe that cost of goods in modern grocery retailers would be on an average 10-20% higher than their informal market structure. Another burgeoning challenge facing the traditional markets, according to (Nwobodo, 2017) is the evolution of online trading. Although in her article she also holds the opinion that these effect is most prominent in cities like Lagos, Port-harcourt and Abuja where there is a higher population of the middle-class and the educated elite. But this assertion doesn't hold water, as Nigeria is deemed the fastest growing population of internet and mobile phone users in Africa; and a force to contend with globally (Channels Television, 2016); no wonder Facebook owner Mark Zuckerburg, visited Lagos State to lay a background to enhance better internet surfing as the speculated population explosion of internet users seems most apparent.

In the aspect of commodities traded in urban markets, 80% of them are food crops that continuously flow into the markets from different rural regions of the country (Okoh & Egbon, 2005). Because the average Nigerian spends a major part of his/her income on food, the markets within urban centres in Nigeria usually operate on a daily basis, and majorly on fresh farm produce. This is obviously seen in the category waste percentage of Lagos state municipal services (Oyelola & Babatunde, 2008). The research showed

that 68.16% of the waste were putrescible in nature. This affirms that mostly organic food maintains relevance in the cities also. A contributing factor to this is that staple diet common with most Nigerian tribes are majorly starch fibre and herbaceous soup with protein in fish or meat. Other stocks are common in Nigerian markets, but they don't receive consistent and frequent patronage as these do.

2.5 Classification of Traditional Market

Markets can be categorized based on different rationale. No particular rubric has been provided as the yardstick to be used in classifying types. But after going through literature, A yardstick for categorization, based on their innate properties was provided. They could be categorized based on how they operate; when they operate; location and by their means of access. Each of these categories gives independent definitions of markets, but within these groups some similarities exist. Others have also been observed to be categorised based on their reputation, which is a result of the kind of goods generally sold at such market locations.

Rural primary markets: these are periodic markets where small producers sell their product. These are found commonly in rural areas with very sparse population, where the sellers gather together on specific days of the week to sell their goods and services to patrons from within and outside their environs.

Structure-wise: These category include permanent and temporary market spaces. Major developed cities that still maintain traditional/public markets usually employ it in a temporary nature; that is they provide large public spaces, for example an empty parking lot, where traders having paid tax on rentable square area per time, construct their temporary stall whose position and size is regulated by the market management (Watson & Studdert, 2006; Joseph Rowntree Foundation, 2007; The Ford Foundation, 2003). At

the end of the day, the traders are expected to clear up their stalls and the parking lot can be used for its intended purpose. This system is very common in developed countries where traditional markets have gone out of vogue due to the dominance of supermarkets and major retail outlets. But in the permanent market spaces category, it is common in developing economies of the world. Usually a space within the town is provided to be used as markets, the stalls are constructed with available raw materials. This also exist in two variants: prototypical and open-air structures. The former exist in proper structures of concrete and allow for storage. The latter is characterised by its naked structural frames that becomes ghost towns at the end of the trading hours (Obaje, 2013), and as such compels traders to carry their goods along with them at the end of the day (Ehinmowo & Ibitoye, 2010). The difference between this and the temporary markets is that; spaces for temporary markets also serve other dominant functions other than the markets, while the permanent open-air markets are spaces specifically provided for markets and nothing else. Others that have a greater level of permanence, have evolved out of residential homes that changed one of the rooms into a kiosk in order to ameliorate the family's income.

Periodicity: Markets in this category are classified based on their duration of operation. According to Ehinmowo & Ibitoye, (2010), they are classified into daily, periodic, and special markets. Daily markets according to him are common in major market centres usually within urban towns; they could be both nocturnal and diurnal markets. Periodic markets are markets that occur on market days. These are common with the rural areas that operate an open market system. Both local and foreign sellers and buyers converge on such special days to transact only to converge again on the next market day the following week. Special markets take place during annual feasts such as New Year and Christmas or also once in two years or perenially like the trade fairs.

36

In brief markets can be classified into various categories because they exist in different localities and have peculiarities and similarities. Markets serve the main function of congregating demand with supply with mutual awareness of the others existence and location.

2.6 Contemporary Market Trends in Lagos

In our present days, the ubiquitous appearances of new forms of markets that have attracted a large section of society against the original traditional forms have been surprising. There is a trend in cities like Indonesia, where patrons are also picking up the habit of visiting modern markets rather than traditional ones (Sisulowati, 2014). Customer's preference to the modern over the traditional is that the modern does not bring the inconveniences of muddy; rowdy; dirty and noisy environments. However, despite this occurrence, a rather controversial phenomenon still occurs in a nearby traditional market: customers still visit and traders still sell their goods in their usual population despite their lack of professional "business acumen" (Mas et al, 2014). Although, in a study conducted in Malaysia, both modern and traditional markets at present share equally the population of patrons in the city (Terano et al, 2015). In another study in Indonesia, they observed that although the trend of modern retailing outlets is mushrooming the city, their research indicated that traditional markets still pose a stiff competition to these stores. Because they focus on fresh food goods, while the modern markets focus more on processed goods and non-food goods. However, the author warned that if traditional markets do not continue to innovate ways to maintain consistent patronage, they may fall for the consistently upgrading modern market structure (Suryadamar et al, 2007).

An excerpt from the United Kingdom's (UK) industry and policy reports asserts that, the UK public prefer to shop in the convenience of corporate retailers over the traditional municipally-run markets (traditional markets)… so, traditional markets should either adapt or die (Gonzalez & Dawson, 2015). They observed that retail gentrification (which is the process where commerce that once served a low-income population is transformed/replaced to serve a population of a wealthier category) is taking place in the UK, although it is seen as an acceptable innovation, as it replaces shabby environments with a more admirable one.

So far, if traditional markets whose integral role in the growth of the Nigerian society refuse to be innovative and contend for a position in the economic society; they may lose their place.

2.7 Modern Markets (Shopping Malls)

Malls have a prominent place in the configuration of modern cities, affecting the daily activities, social relationships and mobility's of their inhabitants. They seem to have taken root in the United States during the postwar, and have been idealized since then as a social space were all human beings have equal access to (Beiro, et al., 2017). Malls have become an inseparable element of modern agglomeration. They are from the tradition of former town marketplace around which trade was developed and local market grew (Heffner & Twardzik, 2014). By virtue of their scale, design and function, shopping centers are relatively sanitary and safe (Gross, 2002). Taking a report analyzing the growing trend in Nigeria's economy, it was observed that plaza's which seem to be on the increase in Nigerian cities may not have gotten as much attention as expected due to the lack of adequate parking spaces, weather conditions and the general environment (PricewatersHouseCoopers, 2016). Malls are large commercial grounds that act as social

sanctuaries that have a primary aim of making profit from the sub-urban population usually about 17km radius around it. It affords both social and basic, hedonistic and edible goods at relatively optimal prices.

2.8 Architectural Qualities of Shopping Mall and Traditional Market

Defining the architectural qualities of malls and traditional markets that could contribute to their successes, it is necessary to have an overview of literature and discover the entire spectrum in view. Researchers have observed that due to the conception and growth patterns of traditional markets, market segmentations (a collection of traders selling the same goods) do not correlate; as they are randomly organized (Oladokun & Emmanuel, 2014). This means zoning criterias are usually not observed in major traditional markets. They also observed that traders were relunctant to rent shop spaces in upper floors as customers found it inconvenient going up floors to make purchases that they may most likely obtain on the ground floor (Oben & Fombe, 2014). A research undertaken in a Taiwanese market indicates that 52% of respondents that visit the market daily come in between 11a.m. to 5p.m. and spend between 30-60 minutes and this was attributed to the period inbetween when stay-at-home mothers visit the market and working mothers close from work (Yang et al, 2016). The random and uncontrolled spate of fire accidents in major Nigerian markets and the inherent terror attacks posed on the country as a whole makes the market place also a volatile part of the city (Today Newspaper, 2016). Planetizen listed 10 successful qualities of a successful market which include; full-day hour operation, central and accessible location, protection from elements, navigable aisle, broad selection of goods, affordability, safety, prepared food and seating, multi-level vending and integration of public space and pedestrian streets (Planetizen, 2014). Others have concluded that the attractiveness of shopping malls are of both intangible and tangible constituents. These components in order of importance based on his findings

39

include atmosphere/aesthetics; the social positioning; entertainment potential; commerce; social density; noise; layout; human resource and safety (Debek, 2015). Another author opined that shoppers in India visualize their experience as a constituent of ambience; physical infrastructure; marketing focus; convenience; safety and security (Singh & Sahay, 2012). While another discovered in his research on university staffs in the United Arab Emirates (UAE); that their preference were comfort, entertainment, diversity, mall essence, convenience and luxury (El-Adly, 2007). Going through these attributes underlined by these authors, it is safe to say that these qualities are applicable to both market typologies. But on the contrary there are already hedge-rules that influence the potential attractiveness of either. For example traditional markets allow for informal haggling: a major incentive for patronage; unlike the malls with already fixed prices. Many traditional markets evolve out of pre-existing structures that are usually not custom-built, as such do not fully comply with regulatory standards, thus, they are faced with various infrastructure-related challenges. (Omofonmwan, 2013; Farinmade & Anyakora, 2012; Awoniyi, 2016; Adeyinka et al, 2016). Unlike the malls that comply supposedly on all front with regulatory standards. But with the above stated qualities, it shows that some qualities border both categories of markets. So in essence, it is observed that asides the physical incentives that attract patrons to these centres; there are also the intangible incentives such as for shopping malls, attractiveness could be based on ego; feelings; social pressure (the assumption that if everyone wants to visit a place, then it is worth visiting); the need to socialize etcetera (Debek, 2015). Others who studied these qualities that tried to discover what patrons considered as more attractive in both traditional markets and shopping malls. The results were categorized into supplementary facilities, spatial arrangement, seller-buyer relationship and circulation (Ohambele & Maina, In review). It was observed that, on a Cronbachs Alpha contrast of all categories, the

respondents indicated supplementary facilities (0.802) to rank highest in the average, preceded by Spatial Arrangement (0.680) and Seller-buyer relationship (0.635) before Circulation (0.567). This means that supplementary facilities is paramount in the success of any market typology. If the future of cities would still thrive and meet up with future societal demands; there must be intentional decisions by stakeholders to ensuring the relevance of public spaces (markets being in this category); Markets/commercial centres which is a major player in the success of cities, should begin to mutate in order to suit the desires of future generations (Khalilah et al, 2016; Aliyah et al, 2016). This can be achieved presently,by observing cues that is communicated by the patterns laid out.

So, with adaptations from these authors, and to be limited by the scope of this research, the qualities to be considered of shopping malls and traditional markets are those with assessable architectural relevance. These include, convenience; fire safety, security, parking area, vertical navigation, waste management, social spaces, thermal comfort ,cafeteria, surface drainage measures; which are dominantly found in shopping malls; landscaping, navigation, way-finding, ingress/egress, market segmentation, aesthetics, shop sizes, storage availability/sizes, spatial ergonomics, noise, seating area and daycare facility; which are dominantly found in traditional markets.

2.9 Lagos

2.10.1 Brief history

Oduwaye (2009), gives a succinct description of Lagos state. It lies approximately between longitude $2^o42'$E and $3^o42'$E and betweeen latitude $6^o22'$N and $6^o52'$N. the state is located in the Southwestern part of Nigeria. Originally, Lagos is opined to have been occupied and dominated by Chief Olofin and his children. He later divided Lagos to his

ten sons as an inheritance, namely, Ikoyi; Aromire; Ereko; Idunnganrah; Idumota etcetra. Consequently, this enforced their spread around the state. Lagos was in 18th century known for its fishing and hunting, as the streams and lagoons afforded such an opportunity (Ademola, 2012). Presently, as Lagos metropolis generally lies on lowlands, with about 17,500 hectares comprise of built area. The metropolis density is about 20,000 per square kilometer (Oduwaye, 2013). Although Lagos grew from a 19th century fishing port with 5,000 in population to a late 20th century metropolitan centre with 4.5 Million in population in 1980 (Aina, 1989). Odumosu, (1999) in his book, outlines Lagos to be the smallest state in terms of land area at 358,861 hectares; which represents only 0.4 percent of the entire country's which now accommodates about 18 Million people.

The state Lagos was created in 1967 during the regime of Major General Yakubu Gowon. Lagos state was formed as one of the twelve restructured states in this period. Before this period, Lagos was under the Federal Ministry of Lagos Authority. Mushin; Agege; Ikeja; Ikorodu and other areas were under the control of the then Western Region. Lagos city was controlled by the Lagos City Council. The state has on its southern borders 180 kilometer lenght of the Atlantic ocean. To the west is Benin Republic; and bordering on the north and east is Ogun state. It is the most urbanized state in Nigeria with only a ratio of 5% still categorized as rural dwellers. It also the most affluent state in Nigeria and also brags to be the most infrastructural state in Nigeria. Asides Abuja, there is no other state in the country with the same amount of infrastructure as Lagos. But yet due to the high population density these infrastructure have not been adequate. Oduwaye, 2009).

So, according to (Fourchard, Lagos, 2010), the present Lagos state government's long term goal is to promote Lagos state in order to attract local and international investment to revitalise the city and give it a global acclaim.

2.10.2 Demographics
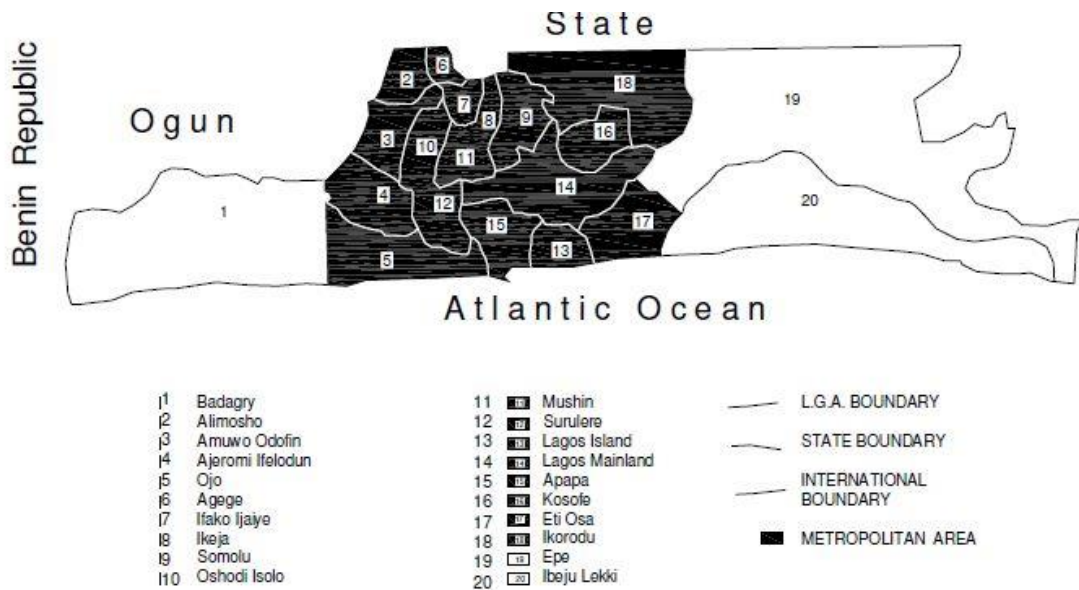
Figure 1: Map of Lagos, highlighting local government areas.
Source: Akinmoladun & Adejumo (2011).

Until 1991 Lagos state was the capital of Nigeria with a population of 120 Million people (Oduwaye, 2008). As at 2015, population speculation for Lagos state was above 20 million occupying 18,588Ha of built-up land area; which is 650persons/Ha with an annual population growth rate of 5% (The Authentic, 2016). Presently Lagos city is among the ten most populous cities in the world (Salau, 2015).

Lagos state boasts of 20 local government areas within its boundaries (Akinmoladun & Adejumo, 2011). It boasts of 15 out of its 20 Local Government Areas as metropolitan cities. This include Lagos Island; Eti-Osa; Lagos mainland; Surulere; Ikeja; Ajeromi-

Ifelodun; Amuwa Odofin;Alimosho; Apapa; Ojo; Somolu; Kosofe; Mushin; Oshodi-Isolo; Agege and Ikorodu; Ifako-Ijaye.
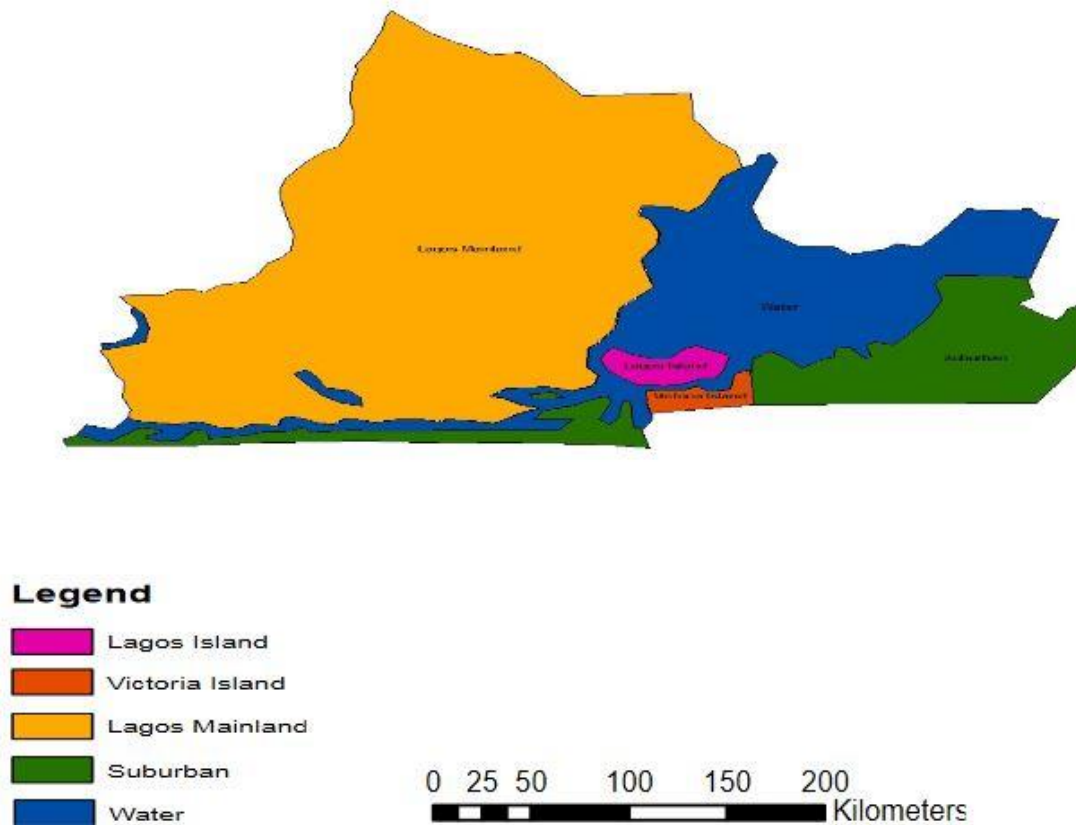
Figure 2: Map of Lagos showing districts of Lagos.

Source: Okwuashi et al (2018).

The lagoon of the Western Nigeria coastline---which is a sandy barrier--- accommodates Lagos state. Interconnecting creeks that run parallel to the Atlantic ocean shoreline on the south frames Lagos state southern boundary. On the west, Port Novo and Badagry creeks feed the Lagoon. The lagoon is fed by rivers, wetlands and canals especially the Ogun river. So, Lagos state is split into fractions by the lagoon menadering around and disposing off into the ocean.

2.10.3 Eko Atlantic City

Eko Atlantic city is an ambitious land reclamation Public and Private Partnership project between Lagos state government and Chagoury group. The decision to reclaim land from the sea to create a more developed and well planned community that would best correct the relatively existing bad image of Lagos is imperative (Diyan, 2016). A 9km area planned to accommodate some of the tallest skyscrapers in Nigeria. The city has lagoons connected to the ocean forming central recreational bays. The entire city has water, electricity and sewage underground service systems synchronized with the allocated plots. Its shores along the Victoria Island beaches, takes the shape of a sickle (Eko Atlantic Sales Office, 2003). As a forerunner in Nigeria's urbanization trend, Lagos state has conceived a new mega city to be located on reclaimed land from the Atlantic Ocean. Eko Atlantic city is a $9km^2$ area of reclaimed land tagged as an investor's haven. This city would include boulevards, avenues and harbours. The proposed inclusion of a waterfront within the city's main alleys as a public space; informs some element of sustainability. Nevertheless, the multiplicity of high glass-sheath storey buildings informs the investors desire to maximize vertical spaces. The city from its proposal seem to have very little space for low-level structures that is a major character of Nigerian markets. As such, these would be one of the variables to consider in the research; to discover if the same applies to a similar prototype in Cameroon, where the upper floors of the market were abandoned due to less patronage (Oben & Fombe, 2014)

The birth of this utopian city does not come without its share of criticism as regards its environmental impact on the surrounding. The displacement and relocation of ocean beds to form reclaimed land implies that there would be an increase in water level around its locality (Akinlose, 2017). Flooding, an endemic environmental crisis that Lagos metropolis experiences annually due to its geography has necessitated the cry for an

environmentally sustainable solution to the manufactured disaster brewed by the introduction of this project (Community Conservation and Development Initiatives, 2012).

2.10   Markets in Lagos

Markets of all kinds, specialized or general; large or small and modern or ancient; exists and are clustered in Lagos (Lagos Waste Management Authority (LAWSMA), 2016). Lagos markets comprise of lock-up shops and stalls, with the former more common than the latter. Surprisingly, there are few open space/open-air markets in Lagos, either as specialized markets; an example is the Akerele plank market in Oto awori Local Government Area. This goes far to say that Lagos is very urbanized, and every segment usually complies with regional planning stipulations. According to (City of Auckland, 2004), open space/air markets are temporary structures that can be relocated or demolished. Open-air markets in Lagos is on the verge of been suppressed by the sprouting of permanent structures. The relative land cost per area within this city at its rate of urbanization is on the increase; meaning more spaces that are open would be occupied by structures to produce the highest overturn where possible. Urbanization in the regard of development may seem as a necessary advantage, but in real sense only depicts an impending disaster or continuous reduction for spaces in a growing metropolitan city like Lagos unless checked. Markets that exist as open-air spaces are usually food markets selling grains, vegetables or usually fish; an example is the Liverpool fish market. Although considered as illegal, the authorities may turn a blind eye towards it as it still an acceptable element of the informal economy. Traders in such venues are not the only ones selling as though they would not be there tomorrow; even those with lock-up shops are in the same dilemma as these. Shop owners in various sections of unplanned or shanty markets distributed around Lagos state, are constantly

under the eerie feeling that the markets would someday be taken forcefully from them in the government's view; for the purpose of upgrading it, but in the users' view; for the purpose of lending it out to higher bidders (Deolu, 2016). A little fraction of Lagos markets are termed as temporary depending on the political forces in play. However, with the long-term goal of the Lagos state government, this section of market users may need a more reliable venue to trade.

From various researches that involves markets in Lagos, the ethnic distributions indicate that the major players in markets are the southeast Igbo's in proximal competition with the indigenous Yoruba's of the South-west (Afolayan, 2011). Other authors have claimed this uncommon distribution as a repercussion of the emigration and naturalization of the Igbo's during the civil war. An ethnic group with a lesser representation is the Hausa's of the north. Although their representation in Lagos is on the increase, and although unconventional; a study indicated that 50.8% of a sample of traders were male against the traditional dominance by females, and they majorly dealt in groceries, mutton, beef etcetera (Solaja et al, 2013). A study indicates that, due to commercial flow of goods from edges of the country to major cities like Lagos, over the years, this has resulted in the creation of ethno-commercial enclaves within major cities (Okoh & Egbon, 2005). Internationally, based on the commercial nature of Lagos metropolis, advanced foreign countries have the effrontery to ship end-of-life or used electronic equipment through local allies to the city that finds its way to other neighbouring West African countries (Manhart et al, 2011).

In Nigerian markets, market politics play a vital role. The creation of associations that ensures the efficient running of the markets seems inevitable and a necessary component. In Lagos they exist in their hundreds, some strong and weak associations (Grossman, 2016). This author believes this informal arm of market government if in proper alliance

with the instituted government can ensure a better run market that would foster a symbiotic relationship betwixt them. More also, they through this association, can get honest and responsive reactions as to the impact or effect of policies the government creates.

In addition, another social aspect of markets that is a way of life among Nigerians who patronize the markets is the skill of haggling (Ayoola, 2009). Although quite insignificant to note, but the haggling culture in Nigeria deserves some limelight. It is what differentiates a wise buyer or seller from the unwise. Bargaining the price of an item, which is a global method of reaching an agreement; in Nigeria, it seems to have a peculiar twist to it. When haggling, until the seller reaches the point of hurling curses then have you reached the actual price of the good. Children learn the art from their parents, and it has been a means of determining prices of goods in traditional markets where prices are not fixed. The price of an item only depends on the haggling skill of the buyer or the seller.

Markets in Lagos; is an entropic mix of various forces and factors. As Lagos government intends to curb the sporadic growth and follow in the United Nations mandate of encouraging a sustainable growth of mega cities; the proper allocation, location, and sustainable management of markets, which is a core component of the city, should not be done haphazardly. The satisfactory operation of trade can be a stimulant for proper user-inclusiveness in maintenance efforts. The representation of the traders in government enhances proper appropriation of implemented policies and foster very responsive relationships between government and this institution. A peculiar scenario in Nigeria is, the ethnic distribution and location of markets also determine the population and kind of patrons, traders, and type of goods to be sold. This determines the application of custom-made approach to dealing with the ethno-social differences that exist.

2.11 Commercial Trends in Lagos Markets

As Lagos is becoming one of the archetypal mega cities in the world, major commercial retail outlets giants are beginning to invest their future in the city. A very common example is the South African franchise Shoprite. Presently, the current trend of large retail outlets emerging in Lagos metropolis are creating very stiff competition for the traditional institutions that inherently dominated the social structure of the city. With the growing and speculated population of the middle class with disposable income, they would be able to afford brands (Diyan, 2016). According to the author, the common method they employ to attract patronage is the inclusion of a variety of benefits; from celebrity hangouts to price discount in their goods. However, the major bane these franchises suffer is the epileptic power supply. Taking a report analyzing the growing trend for Nigeria's economy it was observed that plaza's which seem to be on the increase in Nigerian cities may not have gotten as much attention as expected due to the lack of adequate parking spaces, weather conditions and the general environment (PricewatersHouseCoopers, 2016). There is a necessity by the Lagos state aspirations of the mega-city developments to crack-down on informal sector; transcending traditional forms of sale into modern custom-built markets forms (Oxford Business Group, 2017).

From literature we deduce that the factors considered as vital to the success of a shopping mall include adequacy of parking, general environment and weather conditions.

2.12 Contemporary Lagos Society

There is a new image for Lagos metropolis. Rewinding 18 years backward Lagos was a difficult place to live in or visit (United Nations Department of Public Information, 2016). The notorious traffic jams; heaps of rubbish; harbor for criminals; cacophony of noise etcetera; which has engendered the proliferation of shantytowns and slums in most

unlikely places; examples are the Makoko and Ifako-Ijaye areas (Oduwaye, 2009; Habitat, 2012). The past two governors have succeeded in upgrading Lagos from its mayhem into a model city.

Lagos is the largest mega-city in the world without integrated mass transit network (Atkins, 2014). Commuter transport in Lagos city over the years has overwhelmed the efforts employed, such as construction of bridges, ring roads, restriction of access into city centres on selected days. All this is in a bid to decentralize the city centres (United Nations University, 2017). Other authors have opinionated that the better approach would be implementing policies or instruments that relocates major traffic activities away from the city centre. But an approach that seems to ease the growing traffic tension in the city that seems to be working presently, is the introduction of the Bus Rapid Transport (BRT) lite in 2008. It has really reduced the enormous pressure placed on road traffic arteries. Although this system came into be amid criticism, its impact in providing a cheaper, easier and less cumbersome method of public transportation has been lauded (Mobereola, 2009). Its application into the local sphere was customised to fit its peculiar environment. It was not provided to finally displace the existing public transportation; but rather was an incentive for the refurbishment and introduction of newer buses, taxis, and more dependable maintenance institution. Even though Lagos has one of the most extensive road networks in West Africa, this infrastructure yet cannot serve the expected population. Efforts are on to ameliorate this condition by the inclusion of ferry and train services, the latter that is presently under construction (Salau, 2015).

At present, the water supply scheme that is serving the populace is being refurbished to increase its capacity in order to meet the demand exerted on it (Jideonwo, 2014). Although, since 1910 it has been upgraded to provide 35 times more at 1980 what it used to supply, and many new substations have been constructed to ameliorate the capacity of

the existing ones. It still seems like the state government still has a long way to go to creating an efficient water supply system. As the figures state only 50-55% demand is been met by the city's supply system, but most populace tend to drill personal boreholes for themselves to augment the supply shortage (United Nations University, 2017).

The attitude of Lagosians towards environmental sanitation is disgusting; it has almost become an unstoppable habit. The occurrence of stinking rubbish heaps (as 68% of waste are putrescible matter (Oyelola & Babatunde, 2008)), piled between major roads had almost become the city's global iconic image. It is like the lagosians want you to see their dirt, no wonder they retain their status as one of the dirtiest cities in the world (United Nations University, 2017). But this was Lagos in 1970's; over the years in the government's effort to upgrade the city, various instruments have been used. Lagos State Waste Management Authority (LAWSMA) was created after the abrogation of contract with a waste control firm in 1978. Presently LAWSMA undertakes the duty of cleaning and managing the 5,000 Tonnes of waste produced daily by the city. And their method contrary to convention undertake this duties in the dead of night, as the early hours of the morning are usually jammed with traffic.

It is said that 68% of the working class in Lagos is accommodated by the informal sector, and the growth is spread within the informal sector. Agriculture, fishing and distributive trade are the largest employers of people with informal education which is less than 2% of the workforce (Okwuashi et al, 2008). If 600,000 people migrate to Lagos annually, the question of housing for this number becomes an impending question. Even though their influx would boost the economic sector of the city, the present housing challenge in Lagos; when observing the speculated outlook of Lagos metropolis, isn't any encouragement. Providing services and maintaining them should be the main focus of the state government (Olugbenga & Olukemi, 2013). So, in a broader sense affordable

housing is also an impending challenge in Lagos metropolis. According to Alagbe (2006), the three intiatives he opined that could ameliorate the housing deficit in tackling the slum dilemma currently being experienced in the city are; slums need an upgrade; the scheme of integrating sites and services; adopting earth building technology which is inherently cheaper than whats in vogue. Another common trend in the housing sector of this society is the gated communities. According to Blakely (2007), they are residential developments with restricted access to non-residents; which is becoming the new look of urban Lagos (Ilesanmi, 2012). This trend has three reasons that engenders it: fear; status or style. The insecurity challenge presently bullying the country, the statutory respect that comes with it and the inclination of lagosians to be trendy.

In conclusion, the present government seems to be thriving on the milestones and aiming for the targets set down by past governors. The transportation dilemma seems to be in its convalescing period. Also, with the help of the World Bank and other global donors, the water supply is revamping its credibility and services. The electrical supply has also received serious attention, as well as waste management and housing deficit. In a shorter statement, it is okay to say Lagos has stepped up and is still doing so.

2.13   Social Spaces

Social spaces or public spaces in cities according to Efroymson et al (2009) and Loudier & Dubois (2001) are; parks, traditional markets, small plazas, sidewalks, squares, courtyards, quaysides, parvis, gardens, promenades, esplanades … they have no entry fees, dress code, no script; just a mix of dynamic surprises (Banerjee, 2001). According to wikipedia, social spaces refers to an open and available space accessible by all irrespective of their morphological identity and social or religious inclinations. From another authors perspective (Holland, Clarke, Katz, & Peace, 2007), social spaces are

primarily ostensible neutral grounds that fosters interaction between people within a community within an unplanned or planned environment. Another author says public space is a host of subjective meanings that is accummulated over time and not just a physical setting (Chitrakar, 2016). So a major part of these authors have confirmed that public or social spaces are first of all open to all, that is without restrictions; within a common environment where infrastructure is shared; where there is no crime in intruding someones "private space"; with the aim of fostering harmless community relationships. To backup my statement, an author says, one good characteristics of social spaces is its ability to be dynamic and accommodate a variety of activities (Ryan, 2006). He went ahead to say, because in our dense cities, recreational centres are essential components of a sustainable and healthy urban environment… recreational activities determine the quality of life. To backup his point, a study taken by the United Nations in 2016 observed that social spaces are integral to the urban prosperity of future cities, its social inclusion and vitality, its civic identity and the quality of life (United Nations Habitat, 2016). They emphasized the necessary inclusion of an appreciable area of social space into developing cities to avoid the creation of sub-urbs (which are urban areas without dedicated social/public spaces). It is said to be an open-air living room, our outdoor leisure centre (Cabe Space, 2003).

Although another perspective to the argument for social spaces believe that humans should be allowed to socialize at will and shouldn't be forced into it; otherwise this may engender withdrawal when they feel their space is been threatened. Based on the fact that people may chose not to socialize even when in public realm; Kresl (2012) claims social or public spaces should be distinguished into two categories: obligatory and voluntary social spaces. As their names go; obligatory spaces enforce the intrusion of the public in

ones private space while the voluntary space is where someone can retreat to from the buzzing activities related with the public.

Others that have come into the scene, believe that tangible social spaces may in the nearest future not exist as the era of telecommunications might overcome the need to spend relational time with each other physically in a social space. A research taking in America proved contrary to this popular argument; that the ubiquity of mobile phones has reduced the occurence of public physical interactions (Hampton, Goulet, & Albanesius, 2014). Although technology (that is mobile phones and internet) provides a platform for virtual communication and privacy; still yet it doesn't totally eliminate the human need to interact with people physically. Project for Public Spaces (2014) undertook a research using the time-lapse film method (taking pictures of a space consistently at predetermined periods; either daily, weekly or monthly) to analyse how people use a social spaces through the growing application of technology. Shockingly, it was observed that mobile phones and the internet doesn't substitute the place of physical social spaces, as the number of users of space seem to have increased over the course of 30 years. Some recommendations that social spaces be refurbished with appropriate infrastructure that fits into present technological advancement. Instruments like power outlets, dynamic tables to fit different uses, seating arrangements that encourage different types of interaction on and offline. Not forgetting to note that attracting these people is equally as important as having all these infrastructure. If there is nothing that attracts people to these spaces, this spaces do not function effectively.

Social spaces so far, can be described as a space that affords anyone and everyone an access to interact with other people without ignoring ones discretion. We observed that these spaces are necessary for the communal vitality of a developing city as well as improve the inhabitants quality of life. Although with the invention and innovation of

virtual social spaces, it has been observed to be unable to totally defy the need for physical social interaction.

2.14   Social Spaces in Sub-urban Lagos

Various efforts have been made to curb the overwhelming growth of Lagos city; ideas such as "plant a tree today" a day dedicated to planting trees as a collaborative effort of the Lagos state government and non-governmental organizations in 2009 proved futile (Soladoye & Oromakinde, 2013). Since its commencement, more than 3 million trees have been planted but less than a million are visibly thriving.

2.15   Social Spaces:

Social spaces are usually spaces synonymos with the congregation of people who engage in social activities or ventures and affords face-to-face interaction. Carr et al (1993) in their book 'public spaces' opined that:

> "When public spaces are successful […] they will increase opportunities to participate in communal activity. This fellowship in the open nurtures the growth of public life which is stunted by social isolation of ghettos and suburbs. In the parks, plazas, markets, waterfronts and natural areas of our cities, people from different cultural groups can come together in supportive context of mutual enjoyment. As these experiences are repeated, public spaces become vessels to carry positive communal meanings."

Markets as a social structure is the combination of norms, value, and beliefs that integrates traders into a single social system and shape their trade activities in the market place. (Solaja, Atolagbe, & Soyewo, 2013). Markets are on of the most important social spaces available due to their necessity. Asides from being a major commercial space, the social attributes of a market are also very important.

55

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

In this research, the concept was to obtain the variables from literature that were needed to be analysed and juxtaposed with data from the research. The variables that will be analysed are way-finding; navigation; market segmentation; zoning; parking spaces; landscaped areas; sellers hygiene; buyer-seller interaction; sanitary facility; ingress/egress; market aesthetics; fire safety; waste management; drainage; security; storage spaces; day-care facility; circulation; spatial organization; storey use; haggling etcetera. The method employed in obtaining this data will be the use of qualitative and quantitative instruments. For qualitative instruments observation; site analysis; tracking; tracing etcetera would be employed. For quantitative analysis, the research used majorly questionnaire designed to the respective market structure (either modern or traditional) to fit its peculiarity.

3.2 Specific Data

The table below shows the relationship that exist between the research questions and their various instruments as well as data that would be obtained using the applied instruments. The variable indicates the specific data to be collected and the applicable instruments to be used. The process of presenting the information obtained is listed out on the last column.

Table 3.1(a): Methodology summary

Research Objectives	Research questions	Variables	Specific data	Instruments	Data analysis
To establish from field and literature, the qualities traditional and modern markets (shopping mall) possess.	What architectural features of traditional markets and malls do patrons like?	Circulation	Navigation	Questionnaire and analysis	Charts and figures
			Wayfinding	Questionnaire	Charts and figures
			Ingress/Egress	Questionnaire	Charts and figures
			Storey spaces	Questionnaire	Charts and figures
			Parking area	Questionnaire and analysis	Charts and figures
			Market segmentation	Questionnaire	Charts and figures
		Spatial Arrangement	Space sizes	Questionnaire and analysis	Charts and figures
			Storage space	Questionnaire and analysis	Charts and figures
		Seller-buyer relationship	Haggling	Questionnaire	Charts
			Interaction	Questionnaire	Charts
			Lighting Effects	Visual observation/ checklist	Figures and charts

Source: Author (2017)

Table 3.1(b): Methodology summary

Research Objectives	Research questions	Variables	Specific data	Instruments	Data analysis
To establish from field and literature, the qualities traditional and modern markets (shopping mall) possess.	What architectural features of traditional markets and malls do patrons like?	Seller-buyer relationship	Music	Visual observation/ checklist	Figures and charts
			Interior beauty	Visual observation/ checklist	Figures and charts
			Hygiene	Questionnaire	Charts and figures
		Supplementary Facilities	Fire safety	Questionnaire	Charts and figures
			Waste management	Questionnaire	Charts and figures
			Social spaces	Questionnaire	Charts
			Cafeteria	Questionnaire	Charts and figures
			Buyers population/time	Mapping	Figures
			Buyers' routes	Mapping	Figures
			Sanitary facilities	Questionnaire	Charts and figures
			Drainage	Questionnaire	Charts and figures

Source: Author (2017)

Table 3.1(c): Methodology summary

Research Objectives	Research questions	Variables	Specific data	Instruments	Data analysis
To establish from field and literature, the qualities traditional and modern markets (shopping mall) possess.	What architectural features of traditional markets and malls do patrons like?	Supplementary Facilities	Security	Questionnaire	Charts and figures
			Aesthetics	Questionnaire and analysis	Charts and figures
			Sellers convenience	Questionnaire	Charts and figures
			Store layout	Visual observation/ checklist	Figures and tables
			Market segmentation	Visual observation/ checklist	Figures and tables
			Circulation	Visual observation/ checklist	Figures and tables
			Spatial ergonomics	Visual observation/ checklist	Figures and tables
			Traffic	Visual observation/ checklist	Figures and tables

Source: Author (2017)

Table 3.1(d): Methodology summary

Research Objectives	Research questions	Variables	Specific data	Instruments	Data analysis
To establish from field and literature, the qualities traditional and modern markets (shopping mall) possess.	What architectural features of traditional markets and malls do patrons like?	Supplementary Facilities	landscaping	Visual observation/ Checklist	Figures and tables
			Social spaces	Visual observation/ checklist	Figures and tables
			Ingress/Egress	Visual observation/ checklist	Figures and tables
		Circulation	Navigation	Questionnaire and analysis	Charts and figures
			Wayfinding	Questionnaire	Charts and figures
			Ingress/Egress	Questionnaire	Charts and figures
			Storey spaces	Questionnaire	Charts and figures
			Parking area	Questionnaire and analysis	Charts and figures
			Market segmentation	Questionnaire	Charts and figures
		Spatial Arrangement	Space sizes	Questionnaire and analysis	Charts and figures

Source: Author (2017)

Table 3.1(e): Methodology summary

Research Objectives	Research questions	Variables	Specific data	Instruments	Data analysis
To establish the level of application or limitation of these qualities using case studies and surveys in selected traditional and modern markets.	What architectural features of traditional markets and shopping malls if available would better enhance patronage of these?	Seller-buyer relationship	Storage space	Questionnaire and analysis	Charts and figures
			Haggling	Questionnaire	Charts
			Interaction	Questionnaire	Charts
			Lighting Effects	Visual observation/ checklist	Figures and charts
			Music	Visual observation/ checklist	Figures and charts
			Interior beauty	Visual observation/ checklist	Figures and charts
			Hygiene	Questionnaire	Charts and figures
		Supplementary Facilities	Fire safety	Questionnaire	Charts and figures
			Waste management	Questionnaire	Charts and figures
			Social spaces	Questionnaire	Charts

Source: Author (2017)

Table 3.1(f): Methodology summary

Research Objectives	Research questions	Variables	Specific data	Instruments	Data analysis
To establish the level of application or limitation of these qualities using case studies and surveys in selected traditional and modern markets.	What architectural features of traditional markets and shopping malls if available would better enhance patronage of these?	Supplementary Facilities	Cafeteria	Questionnaire	Charts and figures
			Buyers population/time	Mapping	Figures
			Buyers' routes	Mapping	Figures
			Sanitary facilities	Questionnaire	Charts and figures
			Drainage	Questionnaire	Charts and figures
			Security	Questionnaire	Charts and figures
			Aesthetics	Questionnaire and analysis	Charts and figures
			Sellers convenience	Questionnaire	Charts and figures
			Store layout	Visual observation/ checklist	Figures and tables
			Market segmentation	Visual observation/ checklist	Figures and tables

Source: Author (2017)

Table 3.1(g): Methodology summary

Research Objectives	Research questions	Variables	Specific data	Instruments	Data analysis
To establish the level of application or limitation of these qualities using case studies and surveys in selected traditional and modern markets.	What architectural features of traditional markets and shopping malls if available would better enhance patronage of these?	Supplementary Facilities	SpatiaLErgonomics	Questionnaire and analysis	Figures and charts
			Traffic	Questionnaire	Figures and charts
			Landscaping	Questionnaire	Figures and charts
			Social spaces	Visual observation/ checklist	Figures and charts
			Ingress/Egress	Visual observation/ checklist	Figures and charts
			Social spaces	Visual observation/ checklist	Charts

Source: Author (2017)

3.3 Source of Data

The data used in this research were obtained from the users of both traditional markets and malls, who could be sellers and buyers. In order to obtain congruent data, the patrons' data would be restricted to case studies. Their contributions, opinions and perceptions are integral to the success of this research.

3.4 Mode of Data Collection

For this research various instruments were employed due to the heterogeneity of their sources. Survey was used to collect the opinions/perceptions of the buyers and sellers alike. While case studies, interviews, as well as behavioural mapping was used to determine the users' interaction.

Behavioural Mapping: The study of human behaviour and reactions to societal actions is necessary for the success of this research. To better understand how humans behave, a proper method of analysis has to be employed. Also, in order to corraborate respondents' answers by observing their actions, an appropriate instrument for observing their behaviour within the referred space is necessary. This would be used specifically as a contribution to the qualitative data to be collected. Behavioral mapping is used to systemically document location-based observations of human activity in a space, using annotated maps, plans, videos or time-lapse photography. They are used to document observable characteristics, movements and activities including approximated genders and age, whether in groups or alone, what they are doing, time spent at fixed locations or in transit, and the details of the environmental context (Hanington, 2012).

It is a direct approach and a mechanism for understanding the dynamics of people and their interaction with the urban environment; it is an alternative approach to data

collecting that views people as 'objects' by recording their periodic behaviour. Valuable information can be obtained when behaviour is systematically recorded (Sanoff, 1991).

Using behavioural mapping, users would be categorized into two profiles listed below adapted from Romeo et al (2013).

- **Profile 1**: People whose main reason for visiting the shopping mall is to take a walk (leisure), they reach shopping mall on foot, by bicycle or public transport. In this group, it is sub-grouped based on gender. The males solely come for a walk (leisure), while the females come in for both leisure and commerce

- **Profile 2:** People whose main reason for visiting the shopping mall is to buy household necessities and they usually come in by private transportation, bicycle or cars.

According to this profile arrangement, the role means of transportation plays is a main predictor for users behaviour in the mall. Results obtained from this research would try to agree or disagree with afore mentioned conclusions from other researches. Results obtained from his research concurs with results obtained previously in literature; that a major reason to visit the shopping mall are for leisure and hedonistic purchase, rather than the need for the actual purchase of products (Reynolds, Ganesh, & Luckett, 2002; Sit, Merrilees, & Birch, 2003).

Other researchers have discovered that some shoppers are attracted to malls purely for the economic and emotional motives; while multi-purpose shoppers are driven by a combination of these motives (Ruiz, 1999).

So, behavioral mapping would be one of the instrument employed in order to get a better sense and understanding of what the respondents mean and whether they practice what they say in reality.

3.5 Data Collection Instrument

Questionnaires that seek to obtain information as to the users' perception on various functions within the market were used. The questionnaire sought to determine the users' opinion as regards the present markets functionality based on supplementary facilities; seller-buyer's interaction; spatial arrangement and circulation. Also schedules that comprise of behavioural mapping techniques was applied to determine user-culture that would influence the functionality of the proposed hybrid market.

3.6 Method/Approach

For the purpose of this research, neither qualitative nor quantitative approaches would be used independently rather, they both would be useful for this research. Qualitative method was the feasibility test applied on the quantitative approach used.

3.7 Qualitative Data Analysis

Adapting and restructuring the model used in determining the socio-cultural aspects of markets; the methodology to be used involves a walk-through assessment and behavioral mapping for four key urban spaces within Lagos. The criteria involved in selecting the cases for this research was based on:

- The ambience; the busy-ness (patron traffic) of both shopping mall and traditional markets.
- The use of storey levels; that is spread between one floor layout plans and storeyed planning (Oben & Fombe, 2014)

Thus, on the basis of the above mentinoed criteria, the following cases were selected: Tejuosho and Balogun market as the market cases; Novare-Lekki and Aderenin Ogunsoya malls as the shopping mall cases.

3.7.1   Tejuosho market:

It is a recently renovated three storey complex that is caught within the commercial business hub in Yaba metropolis. The structure is comprised of lettable shops on the storey section with an adjoining open space leasable to temporary traders with space limits. There is also a tent-like market space that has within it a distribution of traders seperated by metallic guazes and polythene panels.

3.7.2   Balogun market:

This market is typical of Nigerian markets; that are an evolution of residential spaces that have been transformed from residential into mixed-use buildings onto commercial use. The market is seamlessly situated within the Central Business District with a core located along a major road which has been transformed into a pedestrian walkway, due to the pedestrian traffic consistent with the market.

3.7.3   Novare-Lekki Mall:

This mall was constructed in 2016 by the Novare Estate Agency. It is a 7 Hectare property located along Lekki-Epe expressway within a cluster of high-income residential estates. The mall has a generous provision of parking bays (approximately 1000) with very luxurious finishes. The mall has four anchor tenants and approximately 100 lettable shops organized around a rectangular loop aisle.

3.7.4   Aderenin Ogunsoya Mall:

 This mall was constructed in 2006 within the densely populated city of Surulere within an agglomeration of malls. The mall has very limited parking lots that is located at the entrace to the mall. The mall is organized along aisles in arterial arrangement that forms grid-iron patterns. There are two central courts with atria that accommodates elevators, staircases and escalators.

3.8 Quantitative Data Analysis

In a bid to achieve the aim of this research which is to highlight an alternative and efficient approach to market design as a public space, by maximizing the success of both malls and traditional markets in a proposed hybrid market for Eko Atlantic city, Lagos Nigeria. Obtaining physical inputs of every patron of both traditional markets and malls in Lagos is an herculean and inefficient task, thus behavioural sampling would be used to obtain a reflection of the entire population. And to achieve this, this research would be using the mixed methods approach (Abdulkarim, 2009; Maina & Salihu, 2016). A questionnaire survey and checklist/visual survey was conducted on two malls and two markets to answer the research question posed for the study. These malls and market cases were chosen on the basis of popularity and location within Lagos.

The questionnaire was categorized into four sections of demographics; market case; user's perception and traditional market/shopping mall qualities. The first section sought consent from respondent as regards gender, sex, nationality, educational level, tribe, languages spoken, frequency of visit, and role. The second section sought to isolate the traditional market or shopping mall cases to which answers in the next sections are based upon. In order to answer research question one, the third section are open ended questions that seek to give space for qualities that our research may not have covered. In response to research question one, regarding their perception as to what level of importance the qualities of malls and markets obtained from literature were; a Likert scale of 1 being least important and 5 being very important qualities of traditional markets and malls. Within this section, variables were dissected into basic questions with architectural relevance. Random sampling technique was used to dispense the questionnaires to the public.

Also, in the visual survey, counting; tracing and mapping (tools of behavioral mapping) was used on users within the shopping mall and traditional market cases. This was undertaken by observing the frequency of patrons per minute and the usual routes taken and a layout map indicating the gender and age.

For the qualitative analysis, individual-centred mapping technique was also used. This tool gives a profound description of the dynamics of users within the urban space, their behaviours and the type of users involved which is produced on a scheduled observation plan. The results are described in a representative map of movement, behaviour and activities of users for each space. The summary of the procedure can be outlined in the following:

1. Produce a simple map that illustrates the ground level of the space, its boundaries, plantations and where visible parking and surrounding roads.

2. Generate a schedule of observation, noting that the space would be observed based on per time-periods.

3. Maps illustrate age group, gender and socio-economic status

4. Each time of observation would be 30minutes, noting significant actions of users in a space and particular behavioral patterns.

5. Using the weekday map and weekend map to produce a map that represents the average overall profile of users behaviour in the space.

6. Develop concluding comments and introducing supportive illustrations, while highlighting positive and negative aspects.

The data collected were interpreted and represented using Figures, Tables and Charts in the form of Means and ratings. The cut-off points for Means and Cronbachs Alpha (reliability test) would be at 3.5 out of 5 points.

CHAPTER FOUR

4.0   RESULTS AND ANALYSIS

The items listed below are results and observations obtained from this research from both qualitative and quantitative approaches.

4.1 Qualitative Analysis

This section tries to analyze the qualitative data that was observed and obtained for the purpose of this research. The results obtained from this research are only of a qualitative character and not quantitative.

4.1.1.   Novare Mall

Taking a bend into the street that leads to Novare mall is a high-end crescent residential building on the left-hand side. One notices a lush green countoured lawn with a series of evergreens lined infront of a wiremesh fence that gives a theatric view of the extravagant parking lot within the mall's premises on the right-hand side. Walking beside the black wire-mesh fence with intermittent stanchions is a wide parking lot.

Plate I: View of large parking lot.

Source: Author's Fieldwork (2017).

Plate II: View of mall façade.

Source: Author's Fieldwork (2017).

Approaching the entrance gate, the wire-mesh wall becomes screeded concrete wall that blends into a massive gate with egress and ingress manned with security personnel supplemented by CCTV cameras. At the pedestrian gate are two security personels with metal-scanners scanning and searching bags before patrons are allowed entrance into the mall premises. On entering the premises, the magnanimous parking lot becomes too utopian to be true, the amount of detailing in construction put into the culverts, kerbs and service ports including markings on the tarmac is quite impressive. Paint lines were used in replacement for concrete kerbs in demarcating adjacent parking lots.

The actual building is sitting on a fragment of the premises. The building has a façade of an ark, with potruding steel beams along the width of the building. It portrays a façade inspired by modern architecture; with very plain off-white coloured walls and plain-glazing covering about 50% of the entire façade (figure 2). The emblem of the mall is quite prominent with other subsidiary chain outlets decorating other sides of the wall. Approaching the mall's entrance, the reverberations of afro-beat music and cool air from the HVAC system oozing out of the mall is felt. There are two main entrances into the

mall, both at opposite ends of the mall's façade. Patrons who arrived the premises via personal cars use the entrance which is closest to their parked vehicles, while pedestrians used the entrance closest to the gate. The entrance has a large revolving door that can permit 5 persons at a time, while on either side of these were two glazed flush doors (figure 3). At the entrance you are subjected to another security search through a standing metal scanner.
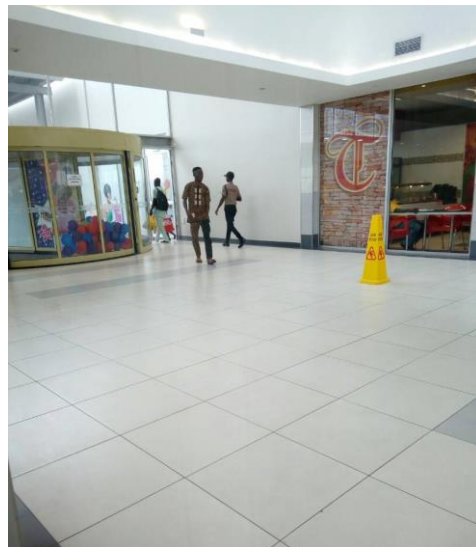
Plate III*:* Internal view towards one of the main entrances.

Source: Author's Fieldwork (2017).

Plate IV: View from the concourse.

Source: Author's Fieldwork (2017).

Walking into the mall is quite exhilarating, as the ambient lighting, thermal conditioning and music gives a theatric welcome. Entering through the West entrance, the atrium and strip lighting on the Plaster of Paris (POP) ceiling is mesmerizing (figure 4). The mall is arranged around a rectangular shape aisle, with intermittent linkages connecting opposite sides of the longer aisles; disrupting the cluster of shops, cinemas, service areas and centre management offices. Seating benches with adjoined wastebins were fixed adjacent the junctions of these aisles (figure 5). The shops are arranged linearly along a straight aisle 7.6m of about 50m long. There is a series of atria consistent at right angles of the rectangular aisle loop (figure 6).

Plate V: View of a bench beside a refuse bin
Source: Author's Fieldwork (2017)

Plate VI: View of one of the many atria
Source: Author's Fieldwork (2017)

The adjacent walls are all glazed, acting as showglass for the lettable shops behind them. For unoccupied shops, advert posters were used to obstruct visual clarity through the glazing (figure 5). Taking a left bend on entrance, the cluster of people in a queue affirms the presence of an ATM and the adjacent bench closest to it was obviously always occupied than any other bench within the mall. Taking a stroll along one of the longest sides of the rectangular aisles, there is an indent mid-way into both blocks that serves as a food-court with an arrangement of chairs and tables; with a cluster of fastfood eateries and the presence of loud and cacophonous mix of music, voices and jingles emanating from television sets and sound systems. The layout of the mall made it easier to cover the entire floor of the mall and navigate through without missing ones way. This can be attributed to the close-end rectangular loop aisle, the linear aisles also the adequate lighting within the mall (figure 8). Hidden nooks or pathways were usually made only for service personel's use which were covertly positioned away from public view. Signages that indicated directions to centre-management and conveniences were prominently anchored to the walls and ceilings (figure 7).

Plate VII: View showing signages at the ceiling.
Source: Author's Fieldwork (2017).

Plate VIII: View along the longest aisle

Source: Author's fieldwork (2017).
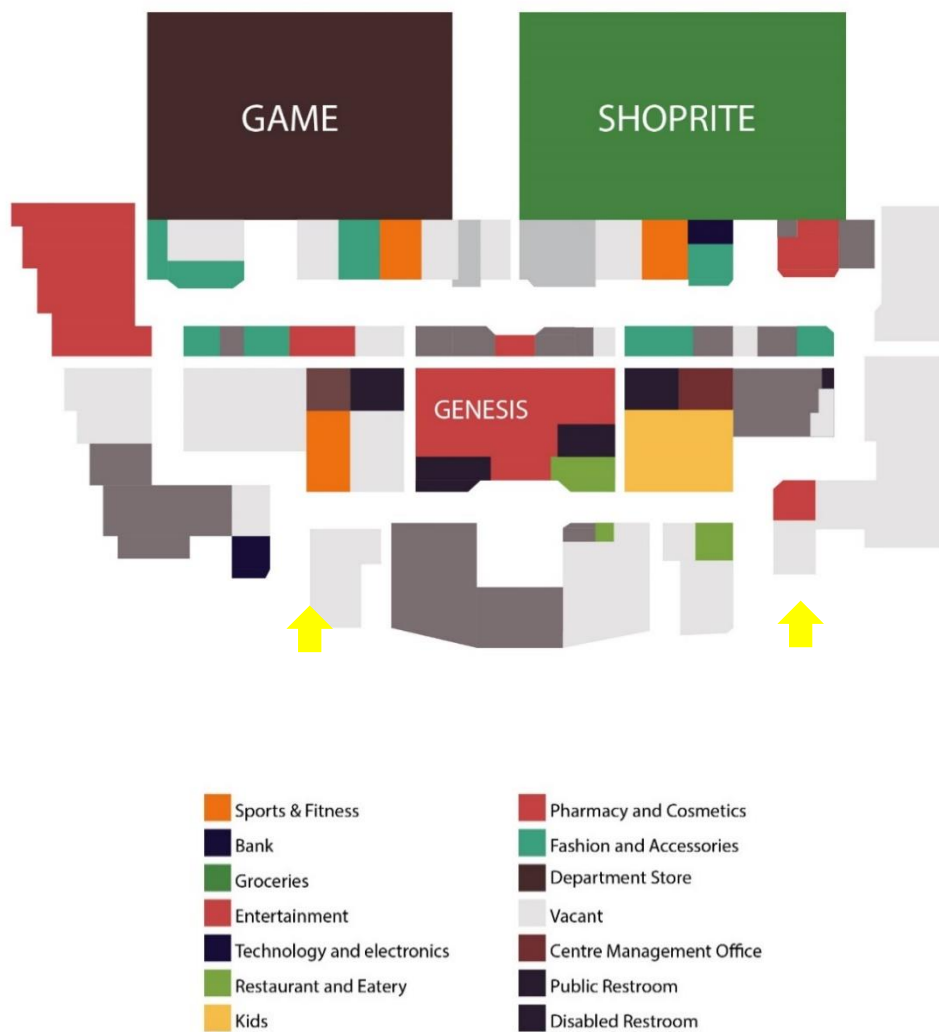
Figure *3*: Ground floor plan layout with legend

Source: Author's fieldwork (2017)

The looping of the aisle acts as a reference point which aides wayfinding; when patrons wander into other perpendicular or tangential aisles, the ability to maintain their geo-location in relation to any side of the loop reduces the possibility of losing their way. The loop serves better as a concourse that distributes into other aisles (figure 9). This therefore implies that, this particular layout and arrangement of aisles: having one central looped-core aisle simple enough for the user to familiarize himself with; may be a prefered layout option to aid in way-finding. Because even with little or no presence of signages, the familiarity of the patrons within the layout improved wayfinding.
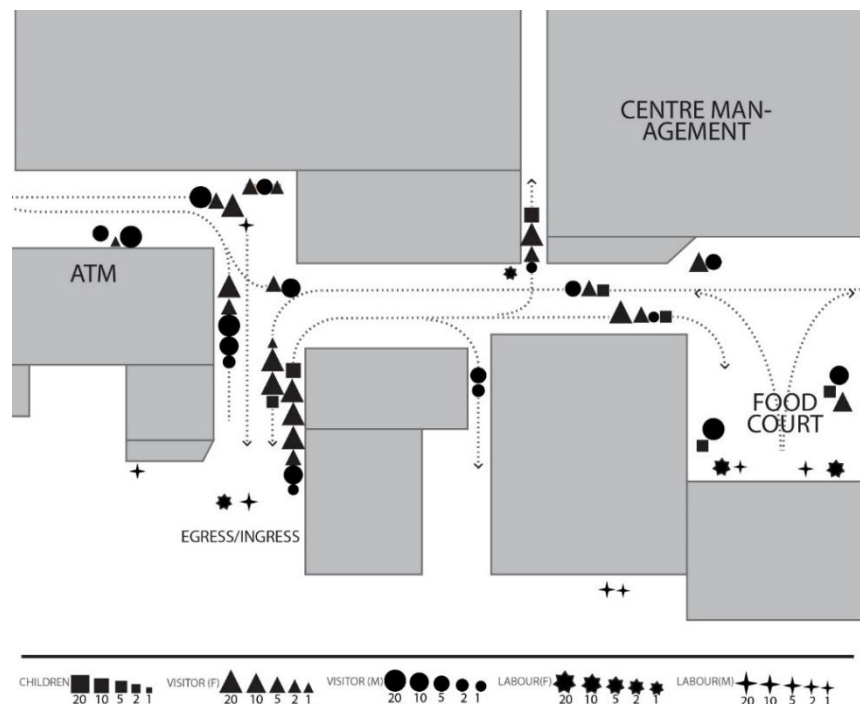
Figure *4*: Behavioral mapping for ground floor concourse

Source: Author's fieldwork (2017)

4.1.2.   Aderinan Ogunsoya Mall

Taking a bend from a relatively less busy street into a busier street that accommodates along its length many commercial premises, including Aderinan Ogunsoya (AO) mall; AO mall doesn't stand out conspicuously within its vista as do most malls within their surrounding; it just seems to be one in the number of storeyed commercial premises.

The only means of identification and seperation of this mall from the various activities undertaken by other premises is the unorganized stamp of brand adverts across its façade. Walking through the side gate there is no visible presence of security personels, the premises is lined by a dwarf wall with steel rod frame. The entrance is grandiose, lacking in quality peculiar to what is obtainable in Lagos' malls. The concrete interlocking tiles on the floor have began to show signs of aging, some chipped at their edges or losing positions, disaligning with the drainage-slope of the floor. It takes about ten paces to go from the gate to the entrance door; this also is unlike other mall premises with grand entrance porches.

Walking through the entrance door, you are giving a lackadaisical body search by a single security personel. It is difficult to assume the layout of the mall on first approach due to the constricting long, dark boulevard-like aisle. On entrance, one is welcomed by relatively warmer air, the tunnel-form of the aisle and the cacophonous lights and jingles emanating from various shop outlet, gives a visitor paranoia. Walking down the aisle, there is an intermittent obtrusion of the main aisle by other darker aisles (fig. 2.2). Just a few steps in, a miniature size electronic LCD/LED advert board stands at the centre of the aisle, constricting the scarce walking space available (fig. 2.1). The aisle is as wide as 5.2metres, the inadequacy of the aisle is amplified by the existing low headroom and dark long aisles. The walls are lined with showglass and checkerboard synthetic tiles; parts of which have been vandalised.

Plate VII: View in front of the LCD

Source: Author's fieldwork (2017)

Walking on this main aisle, it is obvious that most large shop spaces are unoccupied while the smaller ones are active; making the light emanating from the shops incongruous. The ceiling lighting isn't adequate; too weak to see a pin on the floor, some were already defunct; although the ceiling and floor tiles were in relatively good conditions (figure 12).
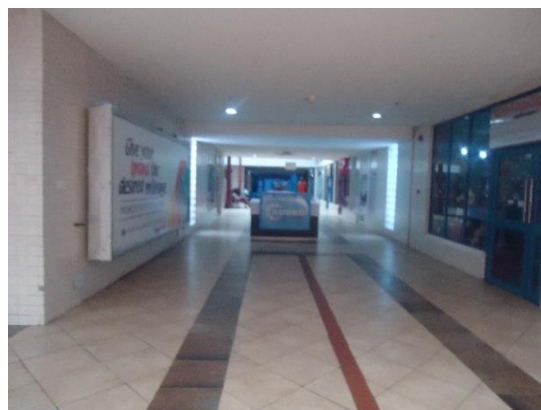
Plate VIII: View within the main aisle

Source: Author's fieldwork (2017).

Meandering through traffic on the main aisle, on the right side is the first atrium space that permits light on to the defunct escalator within the centre court where some form of unusual commercial activity was observed (figure 14).

Plate IX: View from the stair flight

Source: Author's fieldwork (2017)

Plate *X*: View of traders below escalator

Source: Author's fieldwork (2017).

Traders (whom for the purpose of this research would be refered to as temporary-traders) were found beckoning on customers to patronize their goods or intrusively trying to inquire what goods the patron needed in a bid to lead such to a prefered location; it felt like a confluence of "traditional" and "contemporary" markets in one location. These temporary-traders had encroached most of the space around and below the escalator; creating tough competition with the adjacent rented shops; most of which seemed more dysfunctional than operational (figure 16).

Plate XI: View into ATM court

Source: Author's fieldwork (2017)

Plate XII: View of traders below escalator

Source: Author's fieldwork (2017).

They sell a variety of goods from grandiose luxury goods like wristwatches, necklaces to perfumes and small electronic gadgets. Walking past this first atrium (figure 16), the second atrium also to the right (figure 18) lights a central court with lettable shops on its circumference. This atrium accommodates a conjoined straight-flight staircase that has balustrades seperating both flights. Walking to the end of this aisle, one is met by a dead-end with a cul-de-sac micro-court that accommodates a queen palm; a defunct hydraulic lift and an ATM. Very few patrons were seen around this section due to its dark environment. The artificial lighting provided wasn't adequate enough; therefore giving it a cave-like feeling (figure 17).

Plate XIII: View approaching first atrium

Source: Author's fieldwork (2017).

On the adjacent side of this stairs was another collection of unplanned-traders, they had constructed small platforms and spatially differentiated one from the other. Walking towards the end of this atrium court, a visible long corridor with snackbars and restaurants are visible. They are well lit than most lettable shops due to the availability of window openings on the outer walls. Maintaining this aisle forward is the bend that leads to the conveniences. The inconspicuous location of the toilet facilities decreases the ease of wayfinding within this mall. The continuous change of course during movement in the mall reduces a patrons ability to geo-locate his position and spatial relationship. There is no free expression of space, the patron is forced to follow strict straight and linear paths with little options of digressing off course.

Taking the stairs onto the first floor, the thermal comfort within this level decreases; but on the contrary the traffic was higher than in the ground floor and there were a considerable number of young people seen forming social niches along the verandahs. Much of the buzz in activity were more pronounced on this floor in contrast to the ground floor. The first atrium on the first floor is sealed-up, thus inhibiting a stack-effect. It has a void but with interconnected suspended skybridge connecting a defunct escalator. It would have been accurate to assume that the shops on the first floor in this first atrium would be less-patronized due to the presence of a dysfunctional escalator as the only

means of direct access from the lower floor; but on the contrary, they had relatively more patronage as people still make use of the dysfunctional escalator to access the next floor. The category of shops that are located within this court are usually feminine inclined; and as such there was a higher percentage of women or young ladies parading this court. Walking directly above the main aisle on the first floor away from the first court, the second court also has a central void, with no existing skybridge. The corridors and stairway are usually overcrowded and serviced by a relatively younger population of patrons; there are a few number of benches on the verandahs were scarcely unoccupied; because the relatively more social hub of the mall is closer to this wing (figure 18).

Plate XIV: View approaching second atrium
Source: Author's fieldwork (2017).

Moving perpendicularly away from the main verandah, walking toward the other end of the atrium, there is another corridor parallel to the main aisle that gives access to other outlets within a cul-de-sac formation; it seems secluded from the main court area. Reversing in the opposite direction, one is led into another cul-de-sac. Getting closer to the end of this terminal, one is struck by a mild stink of urine oozing from the corridor on

the left which leads into the convenience. Returning back to the main aisle, looking forward is a set of steps that takes one to a higher threshold where the suspended courtyard is located. There is an obvious increase in the thermal discomfort felt within this area majorly due to the lower ceiling height on this sub-second floor; the closed atrium space and limited ventilation; and the relatively higher rate of activity and population occupying this space per time are contributing factors that necessitates the decline in thermal conditioning. One would assume that with all these aforementioned factors, it would experience a lower patron traffic but the reverse is the case. As one comes into this space, the lighting condition is diminished by the hued transluscency of the polymer material used for the atrium. The large and conspicuous but defunct HVAC system hanging openly from the ceiling doesn't ameliorate any perceived optimism in correcting the thermal discomfort experienced. Within this court is a cluster of fastfood outlets selling a variety of snacks and foods on both wings of the yard. They have sets of independent group chairs surrounding a collection of recreational equipments such as snooker tables and chess boards. There is a service door towards the end of this court manned by a security personel which leads to the centre management area. The continuous buzzing activities indicates the potential social capacity that this space flexes in comparism to other social-microcosms within the mall. This thus implies that, patrons would forego thermal comfort to obtain inherent social satisfaction and interaction irrespective of the ambience as long as there is a perceived feeling of social belonging, peer-group affiliations and good snacks/food with amiable music.
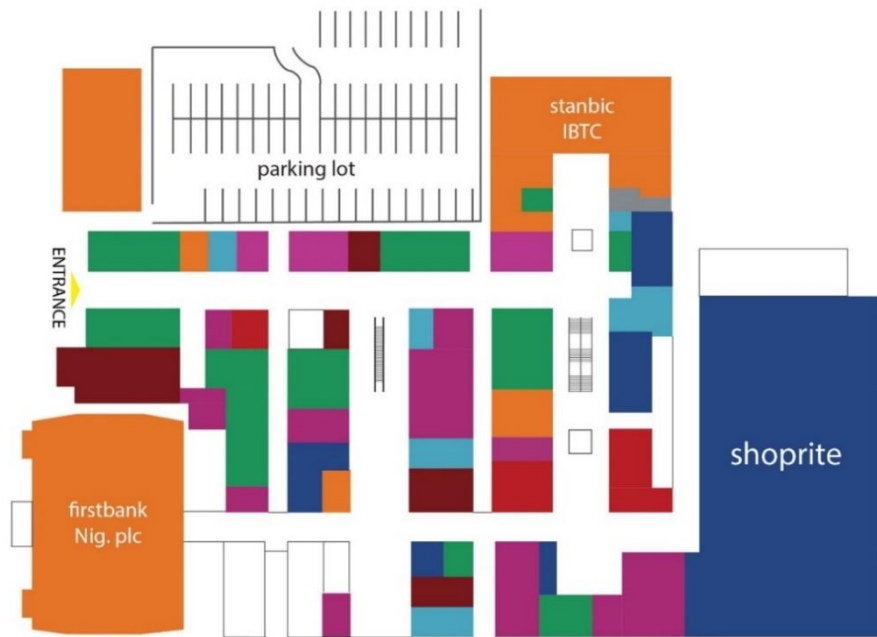
Figure 5: Adeniran Ogunsoya mall ground floor layout

Source: Author's fieldwork (2017)
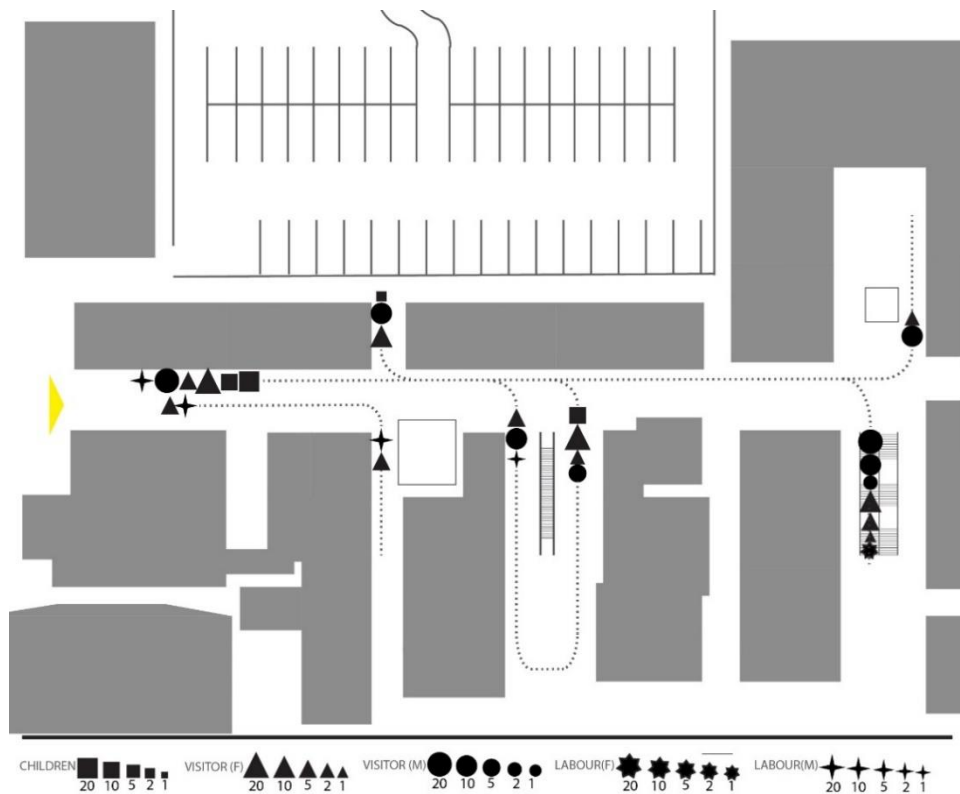
Figure 6: Behavioral mapping showing traffic of patrons on exploded first floor layout

Source: Author's fieldwork (2017)
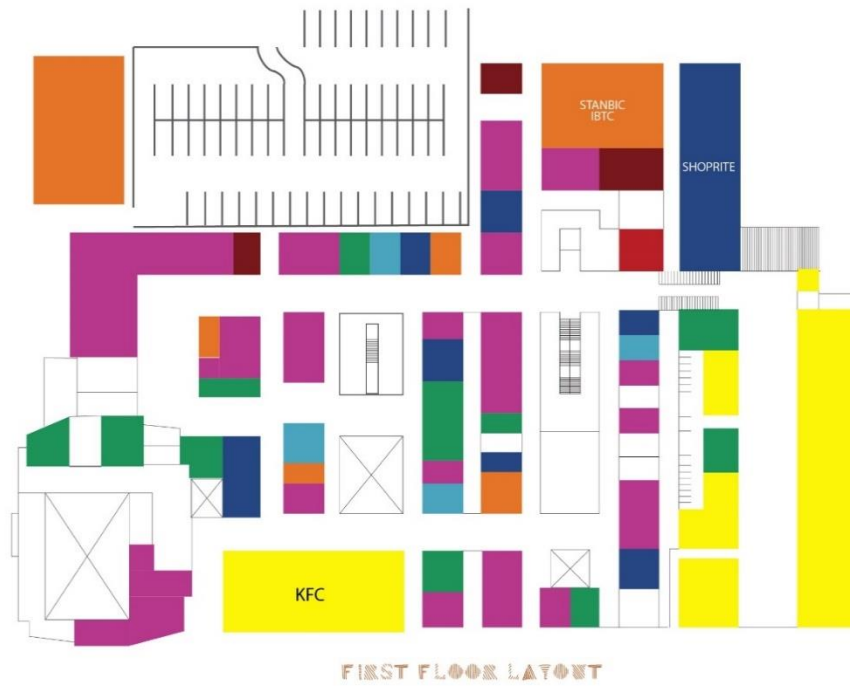
Figure 7: Adeniran Ogunsoya mall first floor layout

Source: Author's fieldwork, (2017)

Figure 8: Behavioral mapping showing traffic of patrons on exploded first floor layout

Source: Author's fieldwork, (2017)

4.1.3.   Balogun Market

Coming off the famous third mainland bridge heading towards the Western region of Lagos state. As the bus halts at a spot on the bridge called CMS, where passengers are obliged off the bus to walk down and off the bridge into a street of vehicular and pedestrian traffic chaos; known as the central business district (CBD) of Lagos; there is a prevalence of tall buildings casting shadows on very well maintained tarred street. Unlike normal business districts, this one seems to be mingled with small and medium entrepreneurs (SME) selling from grandiose luxurious goods to snacks. Walking down the street under the shade of the skyscrapers, there is a perceived increase in the population and density of SME's. Intermittently along this street are magnificient parastatal, institutional and religious buildings.

With directions from reluctant passers-by, one steps into a wide boulevard street where feets have displaced tyres. Its like there is a seamless transition from the business district into the market. The sea of heads is mesmerizing, finding a space to park ones vehicle would be a herculean task that may eventually attract insults from sellers. There is no official signpost or structure that offically welcomes you into this market; which are common landmarks on entrance into Nigerian markets. On the wings of the street, are very dissimilar 2-4 storey buildings outlining the main street. The buildings are also rented shop spaces, but the metamorphosis of the market has covered the façade of the market buildings; wares are arranged from the ground floor to the second floor. Walking on the verandahs close to the shops are very open shops that display most of their goods at the entrance. On first sight it looks like a single-owner shop, but stepping into one of these, a 50meter alleyway with other independent traders outlining it displaying their goods beckon on patrons(figure 24).

Plate XV: View along main street

 Source: Author's fieldwork (2017)

These alleys are repetitive and occur at every open shop 6metres each observed on that main street. At the end of these alley-ways is another long perpendicular pedestrian street with very high traffic running parallel to the main street. This gives an infinite impression of the market. Along these narrow alleys, the proximity of the shops to eachother makes the market a high fire-risk; amplified by the absence of fire-preventive measures or equipment heightens the paranoia. The prevalence of goodwill traders setting up their stalls with large umbrellas and some headstrong drivers whose cars are parked on the shoulders of the street had collectively shrinked the width of the main street; thereby forcing only motorcycle riders, daring car drivers and dogged pedestrians and cart pushers to meander through this street. On the verandah: a meter high threshold at the shoulder of the road; everyone is moving in very unusual speed; the only ones jesting and hanging around the shops are usually sales agents or traders that beckon on customers to patronize them.

Plate XVI: View along main street from pedestrian corridor

Source: Author's fieldwork (2017)

There is no obvious drainage channels along the main street of the market but, the slope of the street aids in draining off the sewage often disposed on to the bare tarmac with suck-holes at the edge of the elevated verandahs. The slope falls forward down the stretch of the road to no terminus in particular. Obstructing pedestrian flow along the verandahs were intermittent concrete electric poles embedded in the concrete slab (Figure 23).

Even in the markets, the sellers had created a social and ethnic niche among themselves. There was a visible demarcation along the street that confirmed the clustering of the Hausa, Igbo and the Yoruba traders. The music that emanated from these niches confirmed this. On entrance, the igbo traders that specialized in clothings, musical instruments, linen curtains and rugs were most pronounced on entrance. But on walking down 200meters along the street, the igbo songs began to faze away giving way to a confluence of hausa islamic recitations and yoruba juju music. The dichotomy in the ethnic background of the traders is not easily distinguishable unless in the apparel worn by the traders and the music emanating from the niches. But with a keen look at the goods displayed, one can observe a clustering of traders in reference to their ethnic background.

On the left shoulder towards the terminus end of this major street was the presence of some hausa traders selling bangles, spices and traditional medicines. This street led to the

parking area for the market, where a large traffic of persons were observed. Although there was no language difference, everyone communicated in pidgin english or yoruba, still yet, the difference in ethnic and social background was most pronounced in their dressing and least in the goods they sold. The observable hausa niche were more of temporary skeletal wooden sheds with canopies; and less of rented shops. They traded in leather materials well ornamented, gold jewelries and spices, textile materials, mainly goods and wares that were obtainable from Northern Nigeria.

There was no conspicuous yoruba niche within the market; they seemed to have blended with the igbo traders which were the majority along the main street. The bend to the right, off the main street was where the ethnic disparity was easily discernible; the observance of yoruba-muslim traders and their kind of goods were very prominent on this street, such as Islamic bookshops, prayer mats, Islamic calligraphy and frames; the similarity in structure and commonality of goods sold.

The presence of a large mosque within the market on the right-wing of the main street was one major concern that impeded the flow of traffic during prayer times (figure 24). Also, the lack of controlled egress and ingress into the market made the market very knotty; the manner in which the surroundings fused with the market makes way-finding almost impossible for visitors. But with the presence of the major street as a point of origin for patrons, wayfinding may become more easier. As you keep walking down any of the arterial streets, there is a reduction in the population of traders; this intuitively informs one of the edge of the market, the street still continues into the city of Lagos.

4.1.4.   Tejuosho Market
Walking down a very busy street littered with petty traders, a similitude of what is obtainable at Balogun market, the business driven environment of Lagos metropolis makes every street a mini-market typology. Tejuosho market has the similitude of a city

89

centre, due to the unnatural boundary created by the fence about its premises. The traffic along this street gets tighter as one approaches the junction at the vertex of the market premises. At these vertex, three access roads and a rail track cross paths, making it a cause of major traffic concern. Also contributing to this is the presence of many commercial banks directly opposite it. The premises is bounded on all four sides by access roads, but along its northern edge runs a rail track. The busy-ness of this junction has fostered the metamorphosis of unplanned commercial hubs along the lanes; further increasing the traffic constraint along this axis. The market is surrounded by a market itself.

Plate XVII: View of market façade along main street

Source: Author's fieldwork (2017)

Plate XVIII: View of aisle with line demarcations

Source: Author's fieldwork (2017)

On approaching the gate on the western edge of the market, the dominant structure of the market is the 3-storey building with lettable shops that have the semblance of residential

apartments. The suspended storeyed floors seemed desolate, as relatively very little activity was observed on them (figure 25). The ground floor seemed to have an impressive series of activities, usually very near the main entrance of the market. The market was obviously recently renovated and the gates, fence and walls still maintained a level of newness. The music emanating from all angles about the market: due to the business environement the market was located in, relinquished any dominance the market should have posed within this location. The gates were wide open, with no security personel in sight, the incongruency of the markets layout didn't provide any intuitive aid in wayfinding.

Plate XIX: View of market structure from ramp

   Source: Author's fieldwork (2017)

Plate XX: View at single unit from ramp

Source: Author's fieldwork (2017)

On the verandah, a collection of fast food sellers with dining furnitures and colourful umbrellas arrayed about were observed. The aroma, jingles and tunes often distracted patrons from other sides of the market. On first approach, presuming the massive storey building complex and the fast-food sellers were the main traders in the market; the whole complex would be considered a waste of space. But inclining into the left-hand wing of the building, there is a peculiar sight of linearly arranaged good-will cloth sellers who trade on skeletal wooden sheds within spaces demarcated with paint lines (figure 26).

Plate XXI: View overlooking temporary sheds from ramp

Source: Author's fieldwork (2017)

These temporary stands trade in good-will clothing and underwears and were less obtrusive in calling out for patrons, because everyone operated within his/her boundaries. On the left of this aisle, walking down the ramp, a single unit shopping centre with gable roofed structure stands out. The sheds were covered with tinted plastic boards to form exterior wall and canopy against the weather (figure 30). Within the structure, the shops were independently demarcated using steel guaze from floor to ceiling to define lettable spaces.

This particular market seemed out of place. The buzz of activities attributed to a market were most paramount outside the premises of the market rather than within (figure 25)

(figure 29). The serenity and relative quietness of the market was unnatural in comparison to the noisy nature of traders outside the premises of the market.

Plate XXII: View of ingress into single unit structure

Source: Author's fieldwork (2017)

The pedestrian traffic within the market was relatively unimpressive compared to the traffic observable on the outside. There seemed to be a pronounced use of the temporary open spaces rather than the renovated rentable spaces within the storey building. The only parts of the market that enjoyed commendable patronage were the single unit structure, the fast food hub at the entrance and good-will sellers in the open.

4.2 Questionnaire Analysis

In a bid to achieve the aim of this research which is to highlight an alternative and efficient approach to markets as a public space, by maximizing the successes of both malls and traditional markets in a proposed hybrid market for Eko Atlantic city, Lagos Nigeria. As it is physically impossible to obtain the inputs of every patron of both traditional markets and malls in Lagos. Using quantitative analysis using selective sampling, the research would want to obtain a reflection of the entire population. A questionnaire survey and qualitative analysis was conducted on two popular malls and two popular markets to answer the research question posed for the study.

The questionnaire was categorized into four sections of demographics; market case; user's perception and market/mall qualities. The first section sought consent from respondent, gender, sex, nationality, educational level, tribe, languages spoken, frequency of visit, and role. The second section sought to isolate the market or mall cases to which answers in the next sections are based upon. In order to answer research question one, the third section are open ended questions that seek to give space for qualities that our research may not have covered. In response to research question one, regarding the qualities of malls and markets obtained from literature; a likert scale of 1 being least important and 5 being very important qualities of traditional markets and malls. Within this section, many vague terms were simplified into many constituent questions.

Responses [N] from the questionnaires were quantitatively analyzed using SPSS v. 21 and Microsoft Excel spreadsheets to provide the means [M], Median [Md], Standard Deviations [SD] and Mode [Mo] in terms of the qualities of markets and malls deemed important in the users' opinion. Mean [M] of each quality above 3.5 out of 5 denoted a fairly important quality seen as magnets that attract patrons to these places. SD's reveal the spread of individual scores around the mean and for this study; this means above 1.0, it indicates a fairly large variability in response for any item. Sum [S] is the total sum of actual scores per item from respondents. Mode [Mo] indicates the score with the highest frequency per item. The Median [Md] indicates the average score per item. Questionnaires targeting a true representation of the youth population [N] 80 were distributed; 58 (72.5%) were retrieved and employed for analysis. Results from the demographics reveal that the average respondent is a Nigerian male between the age of 26-30years, speaks both Yoruba and English [Table 2]. This average patron visits the market as a buyer either once in a week or monthly. In summary, the Yoruba population still maintain majority in Lagos, and the average respondent is within the age bracket

expected in the workforce (26-30years). This data confirms the majority of the Yoruba tribe as the dominant population and the Yoruba language as the common lingua-franca in Lagos.

Table 4.1(a): Demographics

		N	%
Gender	Male	28	48.3
	Female	24	41.4
Age	21-25	15	25.9
	26-30	25	43.1
	31-35	11	19.0
	36-40	2	3.4
	41-45	1	1.7
	46 and above	1	1.7
Nationality	Nigerian	56	100
	Foreigner	0	0
Educational Level	Bachelor degree	14	24.1
	Master degree	32	55.2
	Doctorate degree	4	6.9
Tribe	Hausa	1	1.7
	Igbo	17	29.3
	Yoruba	25	43.1
	Others	13	22.4
Frequency of visit	Everyday	4	6.9
	Once in a week	17	29.3
	Twice in a week	4	6.9
	Monthly	17	29.3
	Once in two weeks	5	8.6
	annually	1	1.4

Source: Author (2017)

Table 4.1(b): Demographics

		N	%
Familiar languages	English	44	47.8
	Igbo	10	10.9
	Yoruba	24	26.0
	Hausa	6	6.0
	Pidgin english	4	4.3
	Etsako	1	1.0
	Arabic	1	1.0
	Atte	1	1.0
	japanese	1	1.0
Role	Buyer	40	90.9
	Seller	4	9.1

Source: Author (2017)

Table 4.2: Market/Mall case

	Cases	N	%
Markets visited	Balogun market	25	43.1
	Tejuosho market	20	34.5
	Ajah market	5	8.6
Malls visited	Palms mall	19	32.8
	Adeniran Ogunsoya	16	26.7
	mall	8	13.8
	Novare mall		

Source: Author (2017)

In reponse to the first research question concerning the qualities of malls and traditional markets; in order to be contextual, the respondents were asked to fill in which malls and traditional markets they had visited. The results indicated that 3 out of 4 of our respondents had visited one of the underlisted malls or markets [Table 3]. This implies

that a larger population of the respondents have visited atleast one of the listed markets and malls; confirming the legitimacy of their response in particular context and also indicating an ambivalent taste for both commercial typologies.

Table 4.3: User's perception of qualities of markets and malls

		N	%
When you come into the market asides the goods, buyers and sellers; what else do you like about the market?	Hustle and bustle	15	30.6
	Nothing	14	28.6
	Arrangement	8	16.3
	Bargaining	4	8.2
	Openness	3	6.1
	Building	2	4.1
	Chaos	1	2.0
	Scent of fresh foods	1	2.0
	Accessibility	1	2.0
When you come into the mall asides the goods, buyers and sellers; what else do you like about the mall?	Ambience	21	25.6
	Serenity	15	18.3
	Beautiful environment	11	13.4
	Navigation	10	12.2
	Comfortable environment	10	12.2
	Fixed prices	5	6.1
	Wayfinding	5	6.1
	Luxury/ego	2	2.4
	Nothing	1	1.2
	Security	1	1.2
	Background music	1	1.2

Source: Author (2017)

The respondents were asked in respect of the mall and market visited what attracted them asides the goods and buyers and sellers. In the case of the traditional market, what was observed was that 15 respondents indicated "hustle and bustle" (30.6%), but also within this category an almost equal opinion of 14 respondents stated "nothing" (28.6%) attracts them. For the malls, the results showed that 13 respondents indicated "ambience" (25.6%) as the major quality in their perception [Table 4]. This in summary means, a higher

percentage of the respondents still like the traditional markets for the buzzing atmosphere it provides. The authenticity of these results is in the fact that, it is the same respondents that filled in for both mall and market qualities. Thus, it is save to say that, the respondents who find nothing attractive about the traditional markets may have found the ambience and serenity in the malls preferable. So, in conclusion, there is a tussle between the malls and the markets presently; where the traditional market is gaining with a very slim margin. Patrons would love to visit the traditional markets because of its hustle and bustle and still yet visit the malls due to its serenity and ambience. The sum total of percentages of elements considered attractive to patrons for traditional market was 71.3% and for malls 74.3%. The proximity of the mentioned values gives an indication that there exists very little disparity between the two. This truly indicates an ambivalent taste for both malls and traditional markets.

In response to research question two, dealing with the level of attention that should be given to these qualities while implementing these in the design of a hybrid market, specifics that are of architectural relevance. The respondents were asked to rate in their own perspective, the level of importance of some listed components commonly considered in the design of malls and markets. The results from the Likert scale showed that 18 out of 22 (81.8%) had mean values above 3.5 [Table 5]. respondents rated proper drainage and waste disposal as the most important factors in the markets; and SD showing very strong congruency. Surprisingly in concurrence with (Oben & Fombe, 2014), buying and selling in upper floors (storey stores) was rated lowest [M 2.58], probably due to the paranoia associated with trading upstairs. Obvious exits out of the market was ranked higher than obvious entrances into the market; maybe due to the fact that after ones business is accomplished, leaving the market was more important than going in. So, in

conclusion, the supplementary facilities are deemed more important than circulatory requirements.

So for traditional markets, the more important criteria to be considered while designing are more of overall cleanliness and orderliness of the ambient environment; then followed by ease of navigation.

Table 4.4(a): Architectural qualities and their level of importance in traditional market

Q/No	Qualities	Mean	SD	N	Sum	Rank
13	Proper drainage within the market	4.60	.707	48	221	1
11	Waste disposal within the market	4.52	0.899	48	217	2
22	Bargaining prices in the market	4.48	1.031	48	215	3
2	Finding what you are looking for in the market	4.42	1.069	48	212	4
12	Availability of toilet facilities within the market	4.38	0.945	47	206	5
6	Adequate parking areas for cars	4.30	1.196	47	202	6
21	Customer-to-seller relationships in the market	4.29	.944	48	206	7
5	Obvious exits out of the market	4.26	1.237	46	196	8
10	Fire control system in each shop	4.21	1.184	48	202	9
4	Obvious entrance out of the market	4.13	1.142	48	198	10
1	Moving from one place to the other within the market	4.08	1.069	48	196	11
16	Security guard post within the market	4.04	1.071	48	194	12
7	Proximity of similar sellers in the market	3.88	1.084	48	186	13
20	Sellers handling consumables in the market	3.75	1.101	48	180	14
9	Room for independent storage for each shop within the market	3.71	1.166	48	178	15
8	Size of shops in the market	3.62	1.033	47	170	16
17	Outer and inner beauty of the market	3.54	1.202	48	170	17
15	Public seating provided within the market	3.51	1.359	45	158	18

Source: Author (2017)

Table 4.4(b): Architectural qualities and their level of importance in traditional market

Q/No	Qualities	Mean	SD	N	Sum	Rank
14	Public waiting area within the market	3.43	1.410	47	161	19
19	Convenient cafeteria settings within the market	3.42	1.252	45	154	20
18	Daycare centre provided in the market	2.65	1.407	48	127	21
3	Buying and selling upstairs in the market	2.58	1.145	48	124	22

Source: Author (2017)

Results obtained from the ratings for the malls indicated that 19 out of 22 (86.4%) components had mean values exceeding 3.5 [Table 6]. Generally, respondents rated adequate parking area as the most important component to be addressed in the design of a mall, succeeded by obvious entrances and exits. Ingress and egress ranking high may assert that patrons would also need to know which way leads out and which leads in and which way leads where; due to the usual complexity of mall layouts. Circulation was rated below security measures and fire control; this portends that safety measures are quite important than movement within the mall. This can be due to the insecurity challenges facing the country. Cafeteria setting also ranked lower than availability of toilet facilities. This means patrons would better have toilet facilities than food courts. Buying and selling upstairs shockingly still ranked low even in malls. This stipulates that there is an overrated attention to shoppers' experience vertically than linear-ly.

So for malls, the more important criteria to consider is availability of adequate parking area and navigation into the mall and knowing where is what, how to get there and which way leads there.

Table 4.5: Architectural qualities and their level of importance in malls

Q/No	Qualities	Mean	SD	N	Sum	Rank
6	Adequate parking areas for cars in the mall	4.72	0.891	48	239	1
4	Obvious entrance into the mall	4.58	0.887	48	243	2
5	Obvious exits out of the mall	4.50	0.885	48	243	3
2	Finding what you are looking for in the mall	4.49	1.069	48	212	4
16	Security guard post within the mall	4.42	0.819	47	234	5
10	Fire control system in each shop	4.41	1.190	47	238	6
12	Availability of toilet facilities within the mall	4.39	1.123	48	237	7
11	Waste disposal within the mall	4.37	1.170	46	236	8
1	Moving from one place to the other within the mall	4.25	1.017	48	225	9
13	Proper drainage in the mall's facility	4.17	1.341	48	221	10
21	Customer-to-seller relationships in the mall	4.15	1.139	48	224	11
17	Outer and inner beauty of the mall	4.04	1.243	48	218	12
7	Proximity of similar sellers in the mall	3.92	1.047	48	196	13
19	Convenient cafeteria settings within the mall	3.81	1.210	48	212	14
15	Public seating provided within the mall	3.79	1.242	48	197	15
8	Size of shops in the mall	3.79	1.098	47	201	15
9	Room for independent storage for each shop within the mall	3.77	1.296	48	200	16
14	Public waiting area within the mall	3.70	1.223	45	200	17
20	Sellers handling consumables in the mall	3.63	1.278	47	196	18
22	Bargaining prices in the mall	3.52	1.611	45	190	19
3	Buying and selling upstairs in the mall	3.50	1.245	48	182	20
18	Daycare centre provided in the mall	2.83	1.463	48	153	21

Source: Author (2017)

Results showed a correlation in both malls and markets: buying and selling on upper levels and day-care centres were ranked lowest in both cases. Contrary to literature, the results showed that the inner and external aesthetics of the mall is not one of the most relevant considerations for malls; but is of more importance in malls than in markets. Public waiting and seating areas are of greater importance in the design of malls than in markets; due to the chaotic nature of markets. People will rather wait and seat in a mall setting than in a market.

The research from onset sought to discover what qualities of a traditional market and malls with architectural relevance are perceived as attractive features to warrant another visit. The qualities that was obtained from literature were categorized into four different groups circulation (navigation, way-finding, ingress/egress, storey spaces, parking area and market segmentation), spatial organisation (stall sizes and storage spaces), seller-buyer relationships (haggling, lighting, music, interior beauty and hygiene) and supplementary facilities (cafeteria, day-care, waste management, social spaces, fire safety, sanitary facility, drainage, security, aesthetics and sellers' convenience). The second research question sought to determine which among these is considered most important in the rank of attractiveness for traditional markets and malls in review. The table below gives a conclusive list of qualities that were rated most important for both malls and traditional markets; and as such, should be given highest considerations in a hybrid market design in order to be deemed attractive to both mall and traditional market users.

Table 4.6: Overall ratings of architectural qualities

QUALITIES	MEANS
Adequate parking area	4.51
Ease of wayfinding	4.46
Waste management	4.45
Drainage	4.39
Available toilet facilities	4.39
Conspicuous egress	4.38
Conspicuous ingress	4.23
Security measures	4.20
Circulation	4.17

Source: Author (2017)

Table 7 shows the overall ranking of the qualities observed by the patrons as the most important qualities to be considered in the design of a hybrid. Adequate parking ranked the highest quality expected in the design of a hybrid market. This therefore implies that, a hybrid market should be built around an efficient parking system. Ease of wayfinding was the subsequent quality for a hybrid market. So, in order to design an efficient hybrid market, ease of wayfinding should be well anticipated by the use of unrestricted alleys/corridors. Appropriate waste and drainage management also ranked next to ease of wayfinding. This buttresses the need to make adequate preparations for the management and disposal of waste and sewage within the facility. Conspicuous ingress and egress, available toilet facility, security measures and circulation were ranked respectively. This infers that, for the average Lagos patron, a pressing demand in a hybrid market wouldn't be security; which may be due to the rarity of insecurity issues, which is commonplace in other parts of the country. This means within this context, an average patron is more bothered about where to park than whether the location of the market is secure or not.

The results presented here only concurs with very few opinion previously consulted in literature. The emphasis on adequate parking spaces as the most important feature of a traditional market or mall is not common place in literature. Emphasis has been placed on other experiential attributes of malls and traditional markets. Adequate parking spaces has always been given a docile remark, referred to as a subtle characteristic. The high rating of parking space in this research shed light on the uniqueness of Lagos as a commercial metropolis with a disparity in its patrons' demand.

The uniqueness of the results is also shown in the substantial ranking of very trivial services that are not considered as features worthy of mention but as necessities. Examples of these are waste management, proper drainage and toilet facilities. The fact that Nigeria is still faced with this endemic infrastructural challenges makes our ecosystem different and often noncompliant with literary standards.

CHAPTER FIVE

5.0 DISCUSSION

5.1 Research Findings and Implementation

The research component sought to discover what architectural features of a hybrid market patrons consider attractive enough to warrant a second visit. The objective of the design is to implement the according to best practices the qualities considered as most important in this context.

Adequate parking being the most important quality in this research was addressed by calculating the anticipated vehicular and pedestrian traffic. Using the vehicle/floor area standard for a commercial facility (1,000bays/250 m^2 Gross Floor Area). Also, taking a cue from literature: to reduce the walking distance that is a deterrent to patrons' visit, the proximity of parking lot to the building was considered. The decision to make the parking lot part of the facility would help to reduce the trekking distance of patrons. Due to the constraint in space, to accommodate the number of parking bays with proper vehicular circulation extra floors was unavoidable. In order to cater for an equal advantage to all commercial floors, the floors with the parking lot was submerged into the sub-basement region; which as a result engendered the need for proper lighting and passive heat extraction. Wide trenches were dug about the entire parking lot wall to permit ambient light into the lower spaces. The use of helix ramps between floors and electronic indicators helped to direct the flow of traffic within the parking floors.

Ease of wayfinding according to literature could best be implemented through the location and identification of conspicuous marker-elements. The positioning of very distinct elements within the space can help in wayfinding. For the design, the use of conspicuous

elements like atria, unique independent façade elements, signage and a main entrance atrium. Geo-locating oneself within the facility wouldn't be impossible.

Waste management was tackled in the design by providing a solid-waste sorting hall on the ground floor, which is fed directly from a trunk that runs through the height of the entire building. This hall can be serviced from the service vehicular bay area. The hall has provision for staff cleaning and air-lock lobbies as safety precautions.

Surface drainage of the building was considered by providing submerged drain holes within the floor, at regions susceptible to run-off. These holes are connected to the main sewage lines of the building, which then leads to the urban sewage line for proper disposal.

Toilet facilities were suitable as discovered from literature to be at a distance of not more than 40m away from any point on the building. With the desire to centralize and isolate the toilet serviceable area, the agglomeration of the toilets at the rear and centre of the building was deemed a favourable option. The provision of toilet for the incapacitated in line with universal design was necessary. The toilet ratio used to calculate the number of toilets to be provided per group of persons was 20persons/toilet. So, with four floors available and an estimated 600patrons/hour traffic, six toilets/floor was incorporated.

Conspicuous ingress/egress was delineated as an important feature. This has strong affiliations with wayfinding. Therefore, to contribute to this, the ground floor has no physical walls that deters movement in and out of the building except on the northern and face. Every other section of the building permits free movement in and out of the verandah.

Due to the location and context of the site (Eko Atlantic City), security measures were already a pre-installed element of the site. The security architecture of the market would

be an active one that comprises of Closed-circuit television (CCTV) and an observation/security room. This was provided for within the administrative wing of the building.

Circulation has been illustrated in literature to be optimum when there is no obstruction in flow of traffic. Research shows that the best circulatory form to use that doesn't permit for any break in flow is one that has the similitude of the word "8". The loop nature of the shape encourages an infinitive flow. Therefore, the main aisle of the market was made to take a form of three loops, and the loops have at their centre atria. The 3.5m width of the aisle adhered to international standards of any value greater than 3.3m for optimal show-glass aisles.

These ten attributes were given more consideration in the design of the market as well as some other features considered in the research.

5.2 The Site

Historical Background of the site

Lagos state was formerly the official and first capital of Nigeria as it gained its independence in 1960; due to the economic and political role it plays in the nation. Lagos state is the smallest state of $1,171km^2$ in Nigeria with the largest population approximately 21Million (est. 2016). It is a state in south-western Nigeria bounded on the west by the Republic of Benin, to the north and east by Ogun state with the Atlantic Ocean forming a coastline on the south. Lagos lies on 6° 27'55.5192" North and 3° 24' 23.2128" East. It has 20 local government areas.

Eko atlantic city is a $9km^2$ landform conceived in 2009 to become the economic city for Africa. It was created in a bid to curtail the eroding shorelines of Lagos beaches. It extends from the Victoria Island shores to the Lekki Phase 1 beaches.

Eko Atlantic

Eko atlantic is a man-made reclaimed land of 9km² that was made adjacent to Victoria Island, thus extending the shores further into the ocean. It lies on 6.4089° N and 3.4120° E. Being a conformed land, the topography of the site was manipulated to accommodate a lagoon and rivers that splits the city into two that flows into the ocean. The city is distributed into ten districts; Harbor Lights, Business District, Marina, Downtown, Eko Island, Avenues, Four Bridges, Eko Drive, East Side Marina and Ocean Front (Plate 3).
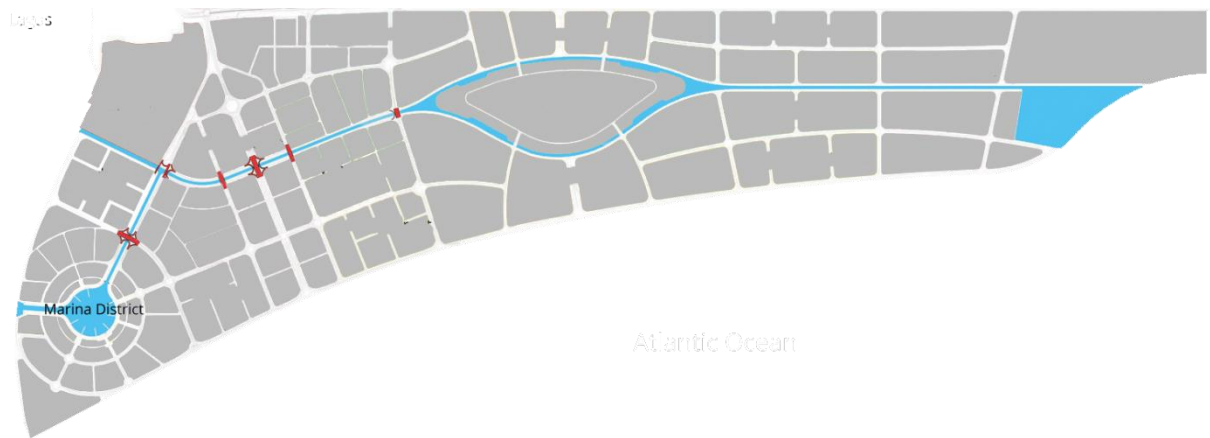

Figure 9: Map of Eko Atlantic City
Source: Author's fieldwork (2018)

Site Location

The proposed site for the Eko Atlantic Hybrid market is located within the Eko Drive district of the city (Plate 4). This district has been segregated to serve commercially intensive development. On the northern edge of this district is the Ahmadu Bello Way which is also adjoined on the other side by estates occupying Victoria Island. The site can be accessed by navigating the various distributor roads connected from Ahmadu Bello Way.
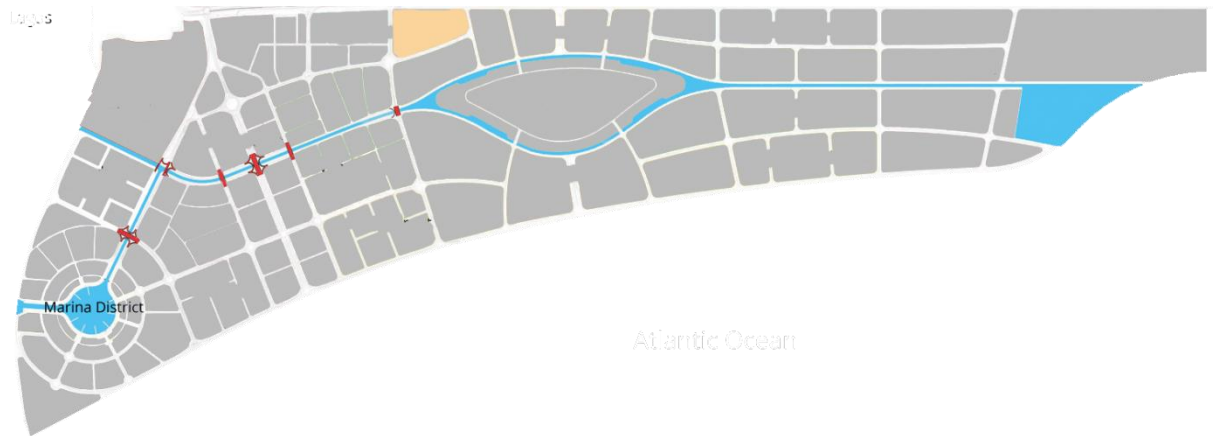
Figure 10*: Map of Eko Atlantic City with proposed site highlighted*
Source: Author's fieldwork (2018)

Site selection

In adherence to the selection criteria offered by literature that proscribes guidelines and restrictions as regarding the location, availability of infrastructure, demographics of users, the site was selected based on:

- Location and accessibility to the users: the ease at which users (whether within or outside the city) can enter and exit the site.

- Various access routes: due to the complicated function of the market, the need for extra service and patron routes were a necessary criterion.

- Land use compliance: the site has to be within the land use for commercial development.

Site analysis

This is the general study of the sites climactic, geographic and environmental factors that could either enhance or delimit the quality of the site. In trying to understand the site, the following parameters were considered.

5.2.5.1   *Climatic characteristics*: this study's the climatic character of the site. The climatic characteristics comprise of wind rose, temperature, humidity, rainfall and sunshine.

- Wind rose: the wind rose is used to determine what direction prevailing winds approach the site from and the speed range. And this showed that the South-South-Western (SSW) are most prevalent with a speed above 12Km/h during the year. And this is primarily as a result of prevailing winds from the Atlantic Ocean which is humid and heavy. The dry Saharan North-easterly is scarcely felt at this region of the country.
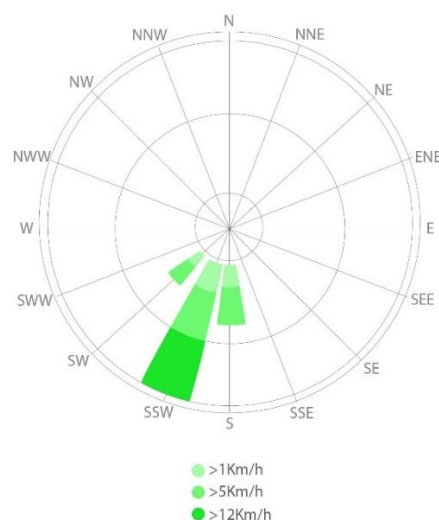

Figure 11: Wind rose diagram

Source: Author's fieldwork (2018)

- Temperature: The average annual temperature is 27° Celsius, and this is as a result of the persistent rainfall occurring throughout most of the year. This implies that the need for active ventilation as a corrective measure wouldn't be a necessity.
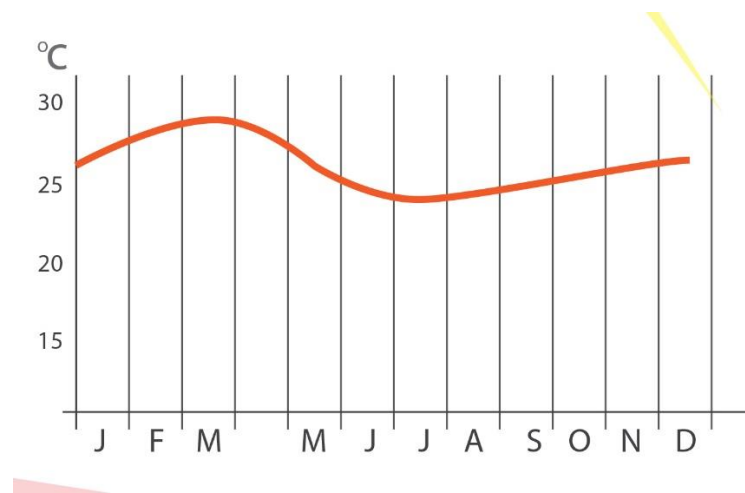

Figure 12**:** Temperature chart for Lagos Metropolis
Source: Author's fieldwork (2018)

- Humidity: Due to the pertinent rainfall throughout the year, the annual humidity ranges between 85-100%. This therefore necessitates the need for dehumidifiers within enclosed spaces in order to counter the high humidity experienced.

- Rainfall: The annual rainfall is caused by the wind from the Atlantic Ocean occurring majorly between September and July with a seasonal break in August. The average rainfall is 142mm, and this torrential rainfall throughout the year highlights the need to curtail dampness as regards goods and human thermal comfort.
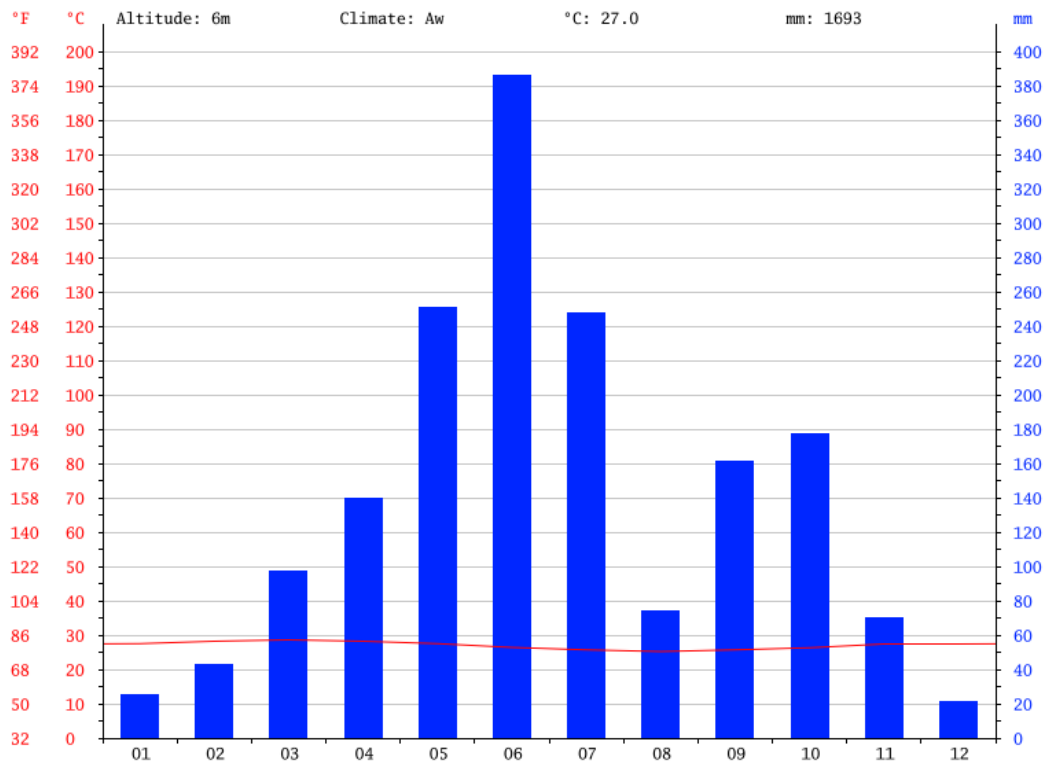

Figure 13**:** Rianfall Chart for Lagos State

Source: Author's fieldwork (2018)

- Sunshine: The sunlight hours are usually inhibited by the casual cloudy days and may not last more than 5hours daily. This means adequate, responsive and active lighting would be required. Over exposure of the facility to sunlight would be an advantage, as the harsh radiation associated with sunlight would be shielded by the clouds.
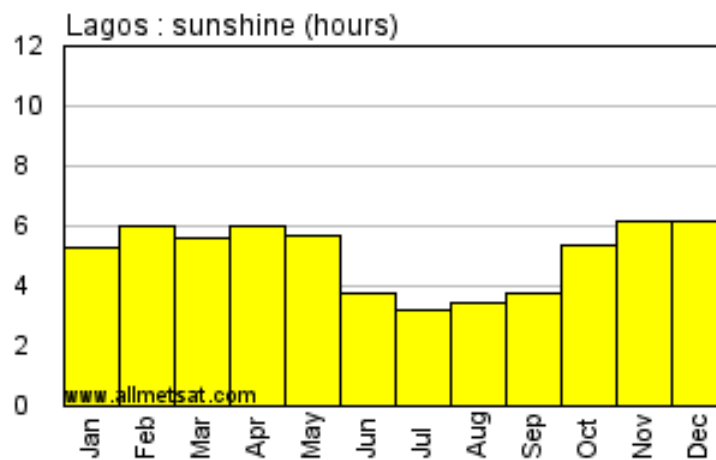
Figure 14: Sunshine hours chart for Lagos State

Source: Author's fieldwork (2018)

5.2.5.2 Geographic characteristics: this study's the physical character of the site. The climatic characteristics comprise of topography and soil properties.

- Topography: The site slopes down towards the Northern edge. Its slope differential is about 6metres apart, which is good for various floor manipulative measures. The direction of the slope indicates the location of the sewage treatment section as well servicing axis; as well as the drainage flow of surface run-off. The façade of the market should be positioned on the higher surface of the site.

Figure 15: Sectional view through proposed site

Source: Author's design proposal (2018)

- Soil: The soil within the site is a homogenous Beecroft with inherent friction capacity of 10KPa. Due to the nature of the site, the foundation type that this soil can support would be a pile foundation system, due to the instability of the soil.

5.1.5.3 Environmental Analysis: This would direct the positioning of various activities influenced by the surrounding activities, vistas, noise and means of access.

- Surrounding activities: Due to the peculiarity of Eko Atlantic City location, it is located within an upper income neighbourhood. Apart from the proposed skyscrapers that would occupy the city, the adjacent area is occupied by low density houses built during the Victorian era. The skyscrapers surrounding the site on the west, south and eastern axis are all of commercially related. The glare from their glazed facades wouldn't be much of a concern due to the lack of long sunlight hours.
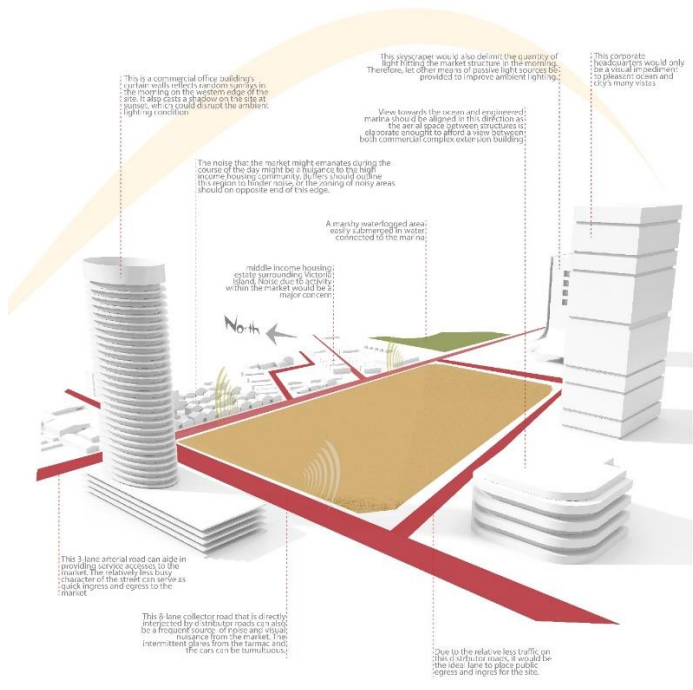
Figure 16: Schematic illustration of proposed site and surrounding structures

Source: Author's design proposal (2018)

- Vista: The vista towards the south is deemed the best as it overlooks the atlantic ocean mixed with the various skyscrapers surrounding it. The view to the North would be considered good but not as good as those to the west and east of the site.

Figure 17: Schematic illustration indicating quality of vistas around the site

Source: Author's design proposal (2018)

- Access roads: The site is bounded on all sides by collector, distributor and access roads. But due to planning restrictions, the market is only permitted to be accessed from one collector and distributor road.

Means of access

This other road is on the outskirt of the Eko Atlantic City, as such it would be used as the main ingress for services int the market.

This expressway is an 8-lane road the largest inAfrica. As such pedestrian movement across the road would be aided by bridges and public transportation. Therefore the need for a dedicated bus drop-off
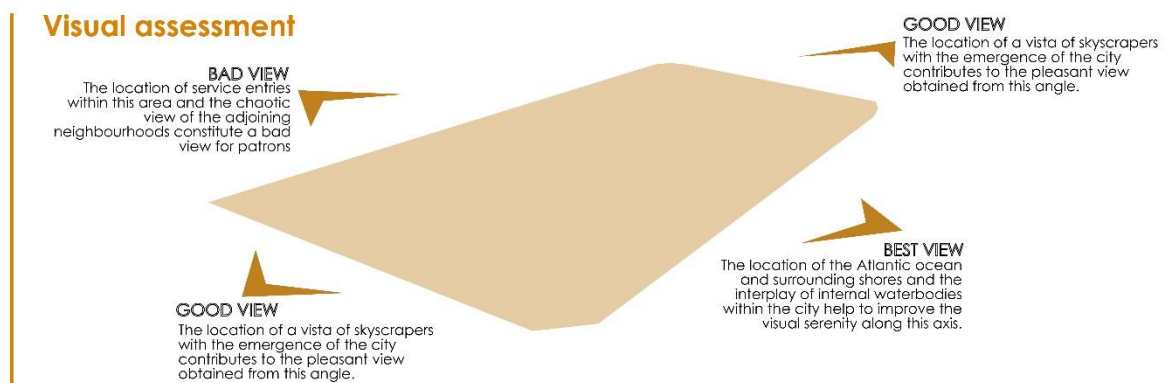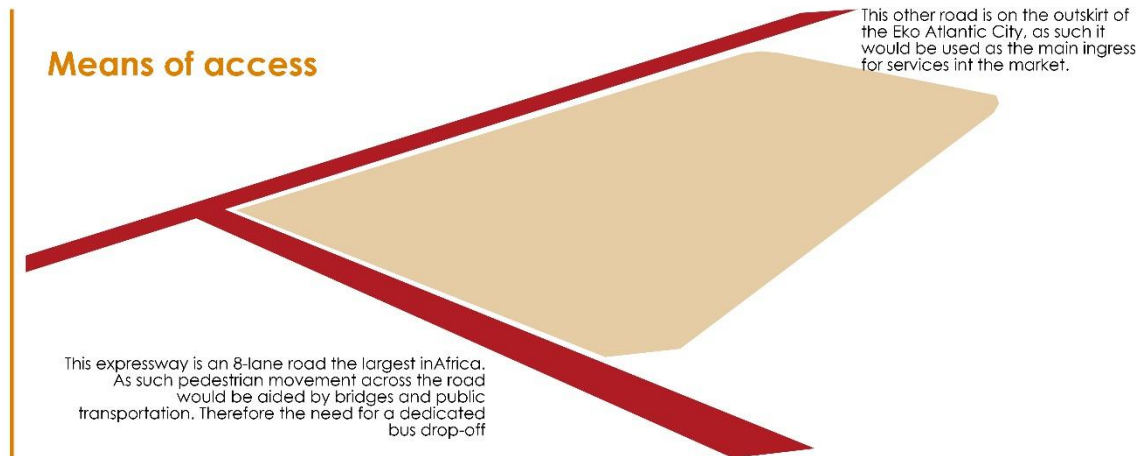
Figure 18**:** Schematic illustration indicating adjoining site access roads

Source: Author's design proposal (2018)

- Noise level: The noise level around the perimeter of the site is excessively high due to the high level of traffic on the rounds which surround the site. And being a market (also a noise source), the placement of sound resistant spaces would have to be buffered from surrounding noise.
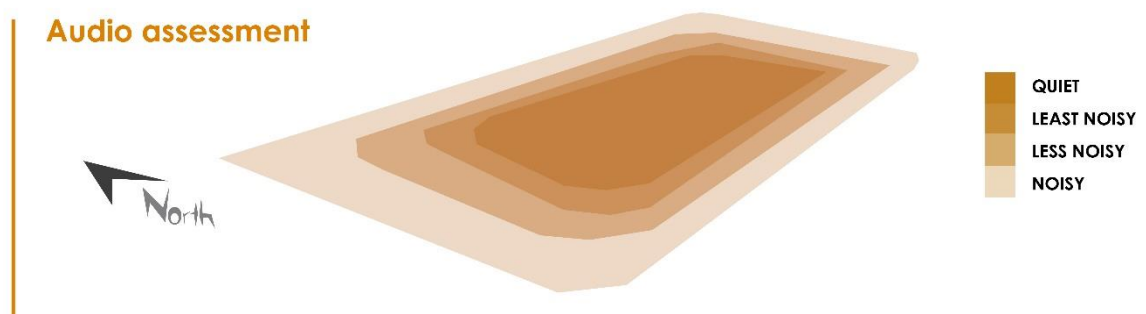

Audio assessment

North

QUIET
LEAST NOISY
LESS NOISY
NOISY

Figure 19**:** Schematic illustration indicating noise level zones

Source: Author's design proposal (2018)

5.3 The Design Brief

5.3.1 Development of Design Brief

The design brief was developed using stipulated guidelines outlined by literature for the design of a market. Also contextual spatial requirements obtained from case studies undertaken. Three sections were identified (administrative, utility, commercial and auxiliary) and their brief developed below:

5.3.1.1 Administrative Section – This section of the market is where daily planning of utility-related activities are carried out. It comprises of the following spaces

 i. Reception: The first point of call when coming into the centre management office.

 ii. Centre manager office: This is the administrative epicentre of the whole facility. The centre manager who is responsible for the utilities used by vendors in the market.

5.3.1.2 Utility Section – This section of the market is in charge of the efficient performance of the market and supply of basic and necessary services for both users and vendors. It comprises of the following:

 i. Parking lot

 ii. Vertical mechanisms

 iii. Janitor's closet

 iv. Power distribution room

 v. Centre monitoring

 vi. HVAC control room

 vii. Toilet

 viii. Waste management

ix.   Mechanical yard

 x.   Service lifts

xi.   Public lifts

xii.   Stairways

xiii.   Staff changing room

xiv.   Storage space.

5.3.1.3 Commercial Section – This section of the market accommodates all vendors and spaces that undertake commercial activities. It comprises of the following:

  i.   Anchor tenant

 ii.   Wet store type A

iii.   Wet store type B

 iv.   Dry store type A

  v.   Dry store type B

 vi.   Level A store type C

vii.   Level A store type D

viii.   Level A store type E

 ix.   Level A store type E

  x.   Level A store type G

 xi.   Level B store type A

xii.   Level B store type B

xiii.   Level B store type C

xiv.   Level B store type D

 xv.   Level B store type E

xvi.   Cinema halls

5.3.1.4 Auxiliary Section

This section of the market comprises of spaces not classified under the commercial, utility-related or administrative section. It comprises of the following:

  i.   Atrium

 ii.   Landscaping: soft and hard landscaping like walkways, plants and undisturbed vegetation

5.3.2 Space requirements and analysis

5.3.2.1 Administrative Section

Table 5.1: Space requirements for administrative section

Space	Number of units	Unit area (m^2)	Total area (m^2)
Reception	1		
Centre management	1		

Source: Author (2017)

5.3.2.2 Utility-related Section

Table 5.2(a): Space requirements for utility-related section

Space	Number of units	Unit area (m^2)	Total area (m^2)
Parking lot	682	10.2	6956.4
Janitor closet	4	33.3	133.2
Power distribution room	1	15.4	15.4
Centre monitoring	1	19.7	19.7
HVAC control room	2	26.3	52.6

Source: Author (2017)

Table 5.2(b): Space requirements for utility-related section

Space	Number of units	Unit area (m^2)	Total area (m^2)
Toilet	4	157.8	631.2
Waste management	1	689.8	689.8
Mechanical yard	1	111.7	111.7
Service lift	2	39.6	79.2
Public lifts	5	39.6	198
Stairway	4	156.3	625.2
Staff changing room	1	54.5	54.5
Storage spaces	2	185.1	370.2
Parking control room	1	18.1	18.1

Source: Author (2017)

5.3.2.3 Commercial Section

Table5.3(a): Space requirements for commercial section

Space	Number of units	Unit area (m^2)	Total area (m^2)
Wet store type A	46	4.1	188.6
Wet store type B	69	6.9	476.1
Dry store type A	46	4.1	188.6
Dry store type B	85	6.9	586.5
Level-A store type C	6	50.7	304.2
Level-A store type D	36	21.5	774
Level-A store type E	26	33.2	863.2
Level-A store type F	20	57.3	1146

Source: Author (2017)

Table5.3(b): Table showing space requirements for commercial section

Level-A store type G	**3**	**95.5**	**286.5**
Level-B store type A	42	22.4	940.8
Level-B store type B	30	50	1500
Level-B store type C	13	95.5	1241.5
Level-B store type D	5	129.5	647.5
Anchor tenant	1	871.6	871.6
Cinema hall	2	321.1	642.3

Source: Author (2017)

5.3.2.4 Auxiliary Section

Table 5.4: Space requirements for auxiliary section

Space	Number of units	Unit area (m²)	Total area (m²)
Atrium	4	147	441

Source: Author (2017)

5.4 Design Development

5.4.1 Concept development

Markets globally are characterized by a very conspicuous idea of busy-ness, and Lagos market is no exception. As the most efficient systems are always reflected in nature, it is wise to take adaptations from nature; and one of the many examples that indicates busy-ness is the beehive. The inner and outer function of the contemporary Lagos markets share similarity with the workings of a beehive. examples of such include noise, social stratification, social spaces, constant activity, ingress on all sides and microcosmic makeup.

Figure 20: Schematic illustration indicating concept ideology

Source: Author's design proposal (2017)
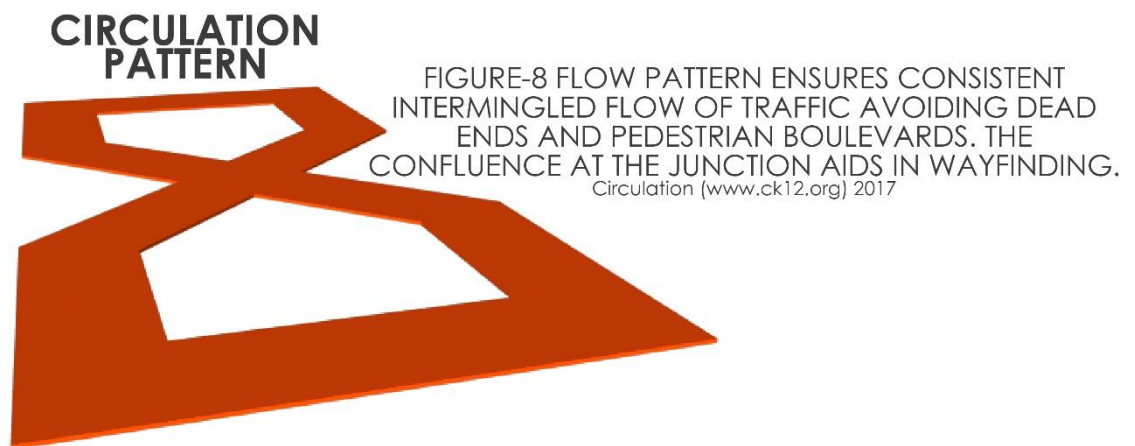
Figure 21: Schematic illustration indicating circulation concept

Source: Author's design proposal (2018)

5.4.2 Circulation concept

For adequate circulation in a large space accommodating many persons, the circulation pattern chosen must be that which would be efficient and serve the purpose of the building. The

circulation concept chosen was the figure 8 concept, that permits an infinitive flow without observable cul-de-sac.

5.4.3   Wayfinding concept

Common with large facilities is the difficulty in locating places or one's position or orientation. In order to solve the endemic problem, the use of wayfinding elements within and around the facility was implemented using atriums at different locations within the building. The atriums were designed to be unique in order to differentiate each from the other. And visible elements that were introduced includes the atrium on main entrance and three atria distributed along the length of the market.

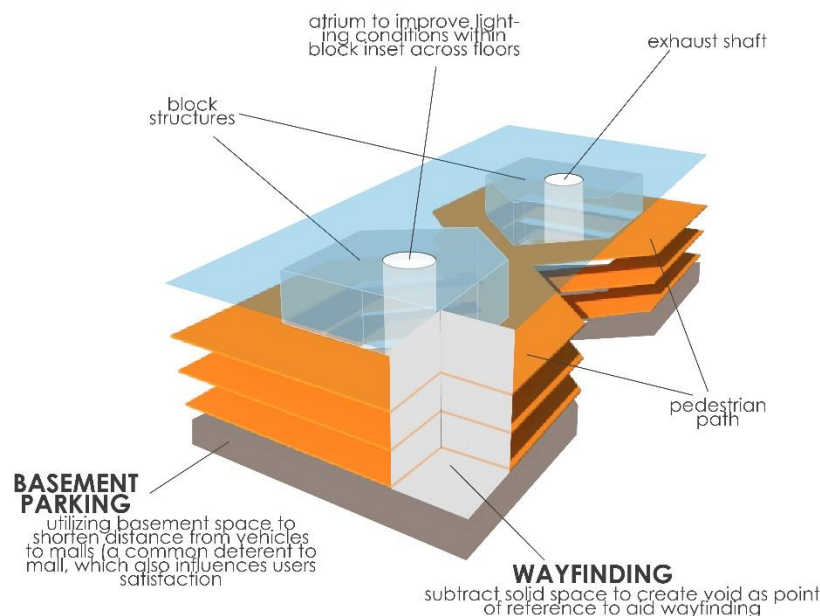Figure 22: Schematic illustration indicating way-finding concept.
Source: Author's design proposal (2018).

5.4.4   Site concept

The site planning concept observes the site features and zoning regulations:

  i.   Topography and drainage by gravity

 ii.   Access and circulation

5.4.5 Elevation concept

The elevation concept tries to imitate the morphology of a beehive by adapting its hexagonal grid cubicles. Using the centroid of each hexagon as an attractor point, the hexagons were perforated by gradating its width through the stretch of the façade away from the attractor point. In mimicry, the gradation of the perforations increases away from the western axis.
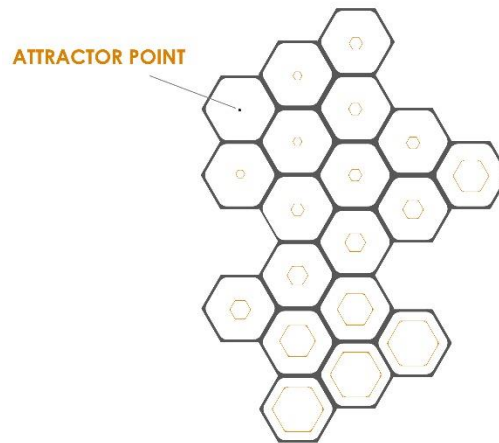
Figure 23: Schematic illustration of facade concept

Source: Author's design proposal (2018)

5.5 Design Considerations

5.5.1 Environmental/site features

Natural feature of the site like its topography, vegetation and trees were taken into consideration in the planning of the site concept. The use of sub-basement floors and basement floors, the location of waste management and mechanical and service yards, the location of sit-outs and terraces were all based on the unique topography of the site, the slope-direction and direction of pleasant views fromn the site respectively.

5.5.2 Respect for site

The sites properties were adhered and little alterations was applied on to the site. The slope, drainage patterns and vegetative quality while designing the building to fit into the requirement of the site.

5.5.3 Circulation

The circulation around the market was designed to admit both pedestrian and vehicles without conflicts. The location of vehicular routes was placed at different zones from that of pedestrians. Also, to admit universal design principles, the use of ramps and mechanical equipment within the market at different zones makes the market pliable by all. In order to improve the circulation within the market, the width and length of the aisle improves circulation as well.

5.5.4 Zoning of facilities and functions

The location of various facilities and sectors of the market were zoned by placing similar activities within proximity. Due to the provision for wet and dry stores, and for traditional and modern settings, the distribution of wet and dry stores and traditional and modern settings in the market made it necessary to interplay these varying characteristics in respect of floors.

5.5.5 Architectural expression

The architectural style is designed to reflect a fusion of contemporary market forms; that are characterized by a playful, attractive and busy language. The use of colours, the ruggedness of the façade and the calm of the landscaping attracts patrons to it. And the visible permeability of the façade makes the building invigorating.

5.6 Design Development

5.6.1 Site planning

The site was zoned to permit for vehicular movement (both service and public vehicles) and pedestrian movement. The location of service bays was deliberately placed for easy access through an alternate route away from public view. The adoption of bus drop-off points on the West was to accommodate those patrons who may chose not to enter into the premises with their vehicles; and also, the Bus Rapid Transit (BRT) that may commute patrons to the market. Provisional parking spaces were provided for patrons who may spend less time within the market or may not wish to use the bulk of the parking lot underground. The entrance and exit from the underground parking lot were placed at adequate distance to permit a convenient slope into respective floors. Pedestrian paths were made to circulate the market in order to permit ingress and egress from every part of the market.
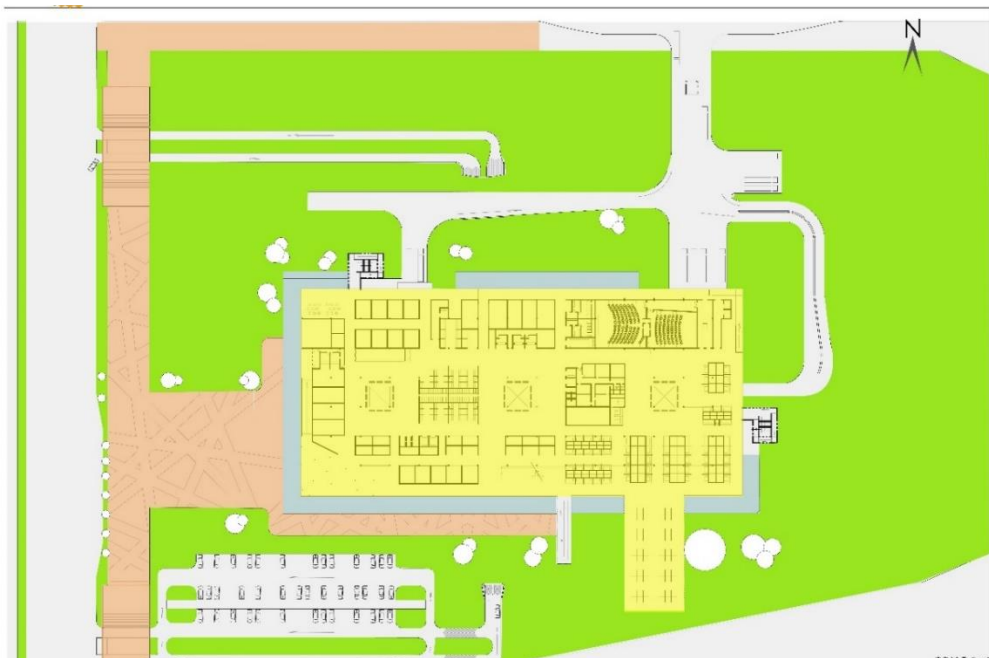

Figure 24: Schematic illustration of plan on site.

Source: Author's design proposal (2018).

5.6.2 Floor plan

The facility has 8 floors with one of these a split level. There are 2 basement floors with 5 suspended floors. The three basement and sub-basement floor accommodates the parking lot, while the ground floor accommodates the Level-A wet store types. The first floor accommodates the Level-B stores, while the second floor accommodates the Level A dry store types. The third floor accommodates the Level-B store type while the rooftop level accommodates a cluster of social spaces. The plan of the market is designed to be porous to allow for proper ventilation and a reduction on energy loads. Only enclosed spaces are maintained by active ventilation and these spaces are accessed by the use of stairs, ramps and lifts. The lighting load is also decreased by the introduction of atria and the use of transparent façade walls.

5.6.3 Elevations

The elevation appeals with the contemporary architectural style prevalent in Lagos. The use of perforated high-density plastic sheets of varying colours for the façade makes the market seem porous and penetrable. The entire structure is functionally designed, while the façade brings in appropriate ventilation into the core of the building. The colour gradation of the sheets lightens the emotions the building portrays.
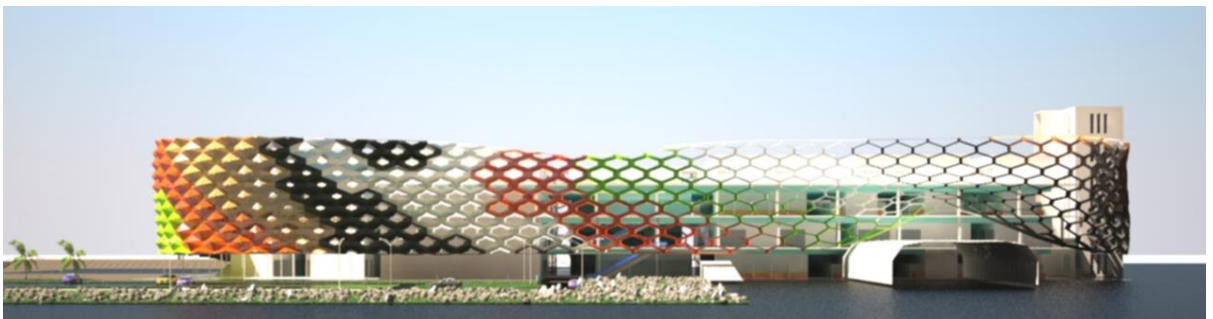

Figure 25: Schematic illustration of right-side elevation view.
Source: Author's design proposal (2018).
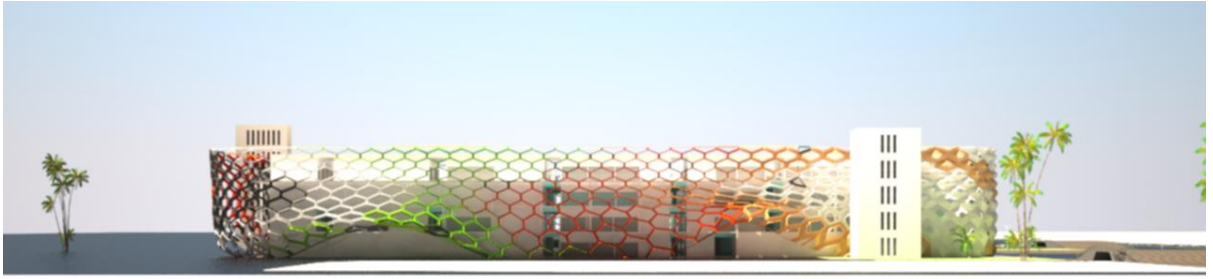
Figure 26: Schematic illustration of left side elevation view.

Source: Author's design proposal (2018).

5.6.4 Walls

The façade wall is made of anchored transparent high-density plastic sheets made bolted to steel vertical rails at equal intervals. The structural walls are a composite of concrete columns and sand-crete blocks laid in stretcher bond. They are however finished differently to suit the required effect. The internal walls are made of sand-crete blocks rendered with cement-sand plaster and finished with desired emulsion paint

5.6.5 Roof

Due to the activity allocated to the roof space, the roof is partially covered by photovoltaic cells and gazebos. The surface of the roofs floor is designed to be impermeable to water run-off. The floor is made of reinforced concrete covered with different layers to protect the surface from water permeation. the roof slope drains water run-off into ducts that transfer water to the sewage system. Green roofs were also adopted at various locations on the roof, in order to fit the scenery expected of a social space; this engendered the adverse use of insulation layers.

5.6.6 Waste Disposal

Waste management mains are already provided for by the city's management. The grey and solid waste produced from the building would be channelled through ducts to the service mains running underground.

5.6.7 Atria

The atria found at different locations within the market serve various functions. Asides from the way-finding and aesthetic function; the atria also serve as a light pipe into best utilized within the basement floors. In order to make up for lighting demands as a result of the deep planning of the market, the use of atria helps to permit light into the core areas of the market, especially the basement areas. Atria spaces were also created on the perimeter of the basement levels in order to permit light into the spaces therein.

5.6.8 Landscape

The use of both soft and hard landscaping elements was necessary in the design of the external landscape that surrounds the building. The use of tropical trees common to the environment such as varieties of palm trees were an added advantage to the scenery of the site. The use of hard landscaping for walkways and driveways were necessary as they conform with planning regulations. The interplay of lawns, pavements, lighting fittings, signposts, bridges, trees and shrubs were obviously necessary to make the landscape stand out as appealing.

5.6.9 Future expansion

As Eko Atlantic city is a planned city, the entire area is expected to be developed on except those earmarked as undeveloped by the planning authorities. The provison for future expansion isn't necessary as all developments made are considered permanent and final.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATION

6.1   Summary

This section summarises users' perception on the qualities with architectural relevance that both traditional markets and malls possess which encourages consistent patronage, that will inform the design of a hybrid market for Eko Atlantic city, Lagos. This thesis sought to discover what the magnets and shortcomings with architectural clout of both traditional markets and malls, and the how they could be maximized and improved upon in designing a hybrid market respectively.

The research started with an introduction that discusses the topic and stated the problems that justified the research, by identifying the aim and objectives. Relevant literatures were consulted and reviewed on both traditional markets, malls, user's bivalency, market magnets and the demerits of these.

The methodology recommended from research was both of a quantitative and qualitative approach. The quantitative was necessary to confirm the qualitative results obtained by the use of questionnaire. The questionnaire was distributed using a purposive sampling method. The case studies were analysed based on predetermined selection criteria to determine what aspect of users' perception were appropriated within the facilities. The variables were derived from literature namely circulation, spatial arrangement, seller-buyer relationship and supplementary facilities.

Analysis of the study area and design development were discussed in chapter five. Critical study of the area in geographical, climatic, visual and environmental perspectives were undertaken.

Beehive was adapted as the façade concept for the design of the hybrid market. The characteristics of markets which are like that of a beehive (microcosmic makeup, noise, activity, social stratification, generous entrance, social space) were the incentive behind its adaptation. These core ideas were used as the main derivatives that guided the design of a hybrid market for Eko Atlantic city. This concept enforces the design to adopt a system that is sustainable and efficient.

6.2   Conclusion

Results showed that contrary to popular perception, hustle and bustle (the mind-set of both buyer and sellers to obtain maximum gain without being cheated in the shortest time possible in a general rowdy and noisy atmosphere), is the magnet in traditional markets which was the major incentive for visiting them. But also, there is an appreciably disgruntled sample that do not see anything attractive in the traditional markets. Also, results showed that for the malls, the most attractive element was the ambience and serenity, which is a common feature in malls. The results also showed that the drainage and waste management factors should be given the most attention in traditional markets than any other factor. This is in correlation with the "magnets" (ambience and serenity) that attracts patrons to the mall. Results also confirmed little or no correlation exists between the "magnets" (hustle and bustle) for markets and the need for parking areas; conspicuous ingress and egress. It can be inferred that an average customer would visit the traditional market to experience the chaotic ambience it affords; even if everything is perfect and available in the malls. There is a psychological attachment between the average "Lagosian" and the traditional market setting. This portends that traditional markets still maintain relevance for Lagos patrons, especially on a psychological basis. Contrary to popular opinion, the aesthetics of a shopping mall is not considered its most

important attribute. Malls with beautiful facades but inefficient and ineffective spaces within are not guaranteed to improve patronage.

The authenticity of these results is in the fact that, it is the same respondents that filled in for both shopping mall and traditional market qualities. Thus it is save to say that, the respondents who find nothing attractive about the traditional markets may have found the ambience and serenity in the malls preferable. So, in conclusion, there is a stiff competition between the malls and the markets presently; where patrons are swaying in the direction of the shopping malls than the traditional market. Patrons would love to visit the traditional markets because of its hustle and bustle and still yet visit the malls due to its serenity and ambience. This truly indicates an ambivalent taste of patrons for both shopping mall and traditional markets characteristics.

6.3   Challenges

One major challenge encountered during this research was while undertaking my fieldwork, where I needed respondents to fill my questionnaire. Because of the nature of Lagos' populace and their schedule, it was difficult to get patrons located within the market to fill questionnaires or respond to interviews. So, in order to get a similar sample population, I sought to distributing questionnaires to students within a university environment. And this was only made possible with persistent coercing.

Also, another major challenge was getting permission to undertake observatory survey within the Shopping Mall and Markets from respective administrators, as they were unwilling to give permission to someone from a Northern origin due to the spate of insecurity in the country. In order not to attract undue attention pictures as though I was taking a "selfie". Patron count was done covertly, while trying to behave as a normal customer.

6.4   Recommendations

The research was able to proffer the following recommendations for the design of a hybrid market in Lagos metropolis:

i.   Where malls are provided due to the purpose, they serve such as the availability of supplementary facility like parking areas, conspicuous egress and ingress; signage and visible routes and fire control measures etcetera; more so are traditional markets relevant for their experiential purposes. And better yet, if adequate and efficient drainage systems; waste disposal system; visible routes and directions; toilet facilities are made available.

ii.   Malls with suspended floors have no significant impact on patronage, if the spaces on suspended floors give the experiential satisfaction; patrons they will navigate their way upward.

6.5   Area for Further Research

As the scope of this research is limited to its architectural qualities of shopping malls and traditional markets in Lagos metropolis, there exist other areas that could be further investigated into.

Questions that are beyond the scope of the research but may be interesting to investigate include;

·   Why are contemporary traditional market typologies not efficient to serve its users?

·   Do locations of malls affect their patronage?

6.6   Contribution to Knowledge

This research tried to contribute to architectural knowledge in the field of users'
perception as well as the design of markets in Lagos, Nigeria. The research aided the
researcher to produce a design proposal that achieved the following results:

1. The research dictates that Lagos patrons are relatively ambivalent towards malls
   and traditional markets, as both still wield some attractive components adored by
   patrons. The sum percentage of satisfaction to features available in the shopping
   mall (74.3%) and traditional market (71.3%) highlight the ambivalence of both
   prototypes to patrons.

2. It also indicated that hybrid markets in Lagos should have its parking system as
   the central focus of its design. Adequate and efficient parking which was the 6th
   most important item for traditional markets (4.30) and the most important item
   for shopping malls (4.72); with the highest average rating of 4.51 should be given
   first and due consideration before any other in a hybrid market facility; which
   will consequently enhance patronage.

3. The relative parity of values denoted for attractive qualities of traditional markets
   (71.3%) and shopping malls (74.3%) indicate that a fusion of both to form a
   hybrid market would prove an ideal enhancement of both qualities.

4. Results also showed that traditional markets can maintain relevance if they are
   able to improve their waste management and drainage methods to encourage
   patronage.

.

REFERENCES

Abba, M. A.-A. (2016). Exploring Socio-Spatial Aspects of Traditional Market in the Design of Kano State Mega Market, Kano State. Zaria, Kaduna State, Nigeria: Unpublished M.Sc. Thesis.

Ademola, F. (2012). The challenges of improving informal sector activities conditions in Lagos Island, Nigeria. *British Journal of Arts and Social Science*, 218-232.

Adeyinka, S., Kuye, O., & Agbabiaka, H. (2016). Assessment of market facilities and locational effects on adjoining neighbourhoods in Nigerian urban centres: Empirical evidence from Akure, Nigeria. *International Journal of Scientific and Technology Research, 5*(4), 199-206.

Afolayan, A. A. (2011). Dynamics of internal and international mobilityof traders in Nigeria. Ibadan: University of Ibadan. Unpublished M.Sc. Thesis.

Aina, T. A. (1989). "many routes enter the market place": housing submarkets for the urban poor in Metropolitan Lagos, Nigeria. *Environment and Urbanization*, 38-49.

Akinlose, R. (2017). *Spotlight on Lagos Housing Development--Eko Atlantic City.* Lagos: RAC.

Akinmoladun, O. I., & Odemuja.T. A. (2011). Urban agriculture in metropolitan Lagos: An inventory of potential land and water resources. *Journal of Geography and Regional Planning, 4*(1), 9-19.

Alfa, T., Lotje, K., & Yoshiharu, S. (2006). Significance of traditional markets and supermarket functions for local farmers and consumers: A case study on marketing of vegerables in Manado, North Sulawesi, Indonesia. *Bulletin of Faculty Agriculture, Saga University*, 1-16.

Aliu, O. (2014). Challenges of traditional markets administration in Yagba communities, North-Central Nigeria, 1900-2010. *Research on Humanities and Social Sciences, 4*(22), 26-33.

Alkali, G. (1991). *An Attempt to Solve the Problem oof Circulation and Congestion in Market.* Zaria: Unpublished M.Sc. Thesis.

Amin, A. (2006). *Collective culture and urban public space*. Retrieved from Public spaces: http://www.publicspace.org/en/text-library/eng/b003-collective-culture-and-urban-public-space

Atkins. (2014). *Future proofing cities: The Lagos energy sector.* Lagos: Atkins Limited. Retrieved from www.atkinsglobal.com/fpc 24th March 2017

Awoniyi, M. A. (2016). The emergence of common markets in West Africa: An examinationof cross-culture and ethnographic marketing system of Alaba international market, Lagos-Nigeria. *American Journal of Industrial and Business Managment*, 136-154.

Ayittey, G. (1991). *Indigenious African Institution.* U.S.A: Transnational Publishers Inc.

Ayoola, K. A. (2009). Haggling exchanges at meat stalls in some markets in Lagos, Nigeria. *Discourse Studies, 11*(4), 387-400.

Babangida, H. (2015). Islamic Architecture. (O. Chinedu, Interviewer) Zaria, Kaduna, Nigeria.

Balogun, F. A. (2011). *Management of traditional markets in Ibadan Nigeria: A focus on Oja'ba and Oje markets.* Urban and Regional Planning. Ibadan: Unpublished M.Sc Thesis.

Banerjee, T. (2001). The future of public spaces. *American Planners Association*, 9-24.

Beattie, M. (2008). Hybrid Bazaar Space. *Journal of Architectural Education, 61*(3), 45-55.

Beiro, M. G., Bravo, L., Caro, D., Cattuto, C., Ferres, L., & Graells-Garrido, E. (2017). *Shopping mall attraction and Social mixing at city scale.* Bueno Aires: Faculty of Engineering, University of Buenos Aires.

Blakely, E. (2007). Guest editor's introduction: Gated communities for a frayed and afraid world. *Housing Policy Debate*, 475-480.

Bohannan, P. (1964). *Africa and Africans.* New York: The Natural History Press.

Cabe Space. (2003). *The value of public space: How high quality parks and quality spaces create economic, social and environmental value.* London: The Tower Building.

Carr, S., Francis, Rivlin, & Stone. (1993). *Public Spaces.* Cambridge: Cambridge University Press.

Channels Television. (2016). *Mark Zuckerburg visits Nigeria.* Lagos: Channels Television.

Chitrakar, R. M. (2016). Meaning of public space and sense of community. *International Journal of Architectural Research, 10*(1), 213-227.

City of Auckland. (2004). City of Auckland-District Plan. In C. o. Auckland, *Central Area Section*. Auckland: City of Auckland.

Community Conservation and Development Initiatives. (2012). *Eko Atlantic: The dream of a new model city struggling with transparency, good governance and negative environmental impacts.* Lagos: CCDI.

Debek, M. (2015). What drives shopping mall attractiveness. *Polish Journal of Applied Psychology, 13*(1), 67-118.

Denegri-Knott, J. (2007). *Becoming a Market: The social production of market spaces as products of power.* Bournemouth: Bournemouth Media School.

Deolu. (2016). *Anxiety as Lagos plans to demolish another market*. Retrieved from Information Nigeria: http://www.informationng.com/2016/02/anxiety-as-lagos-plans-to-demolish-another-market.html. Retrieved on 15th March 2017.

Dewett, K. (2010). *Modern Economic Theory.* New Delhi: S. Chand and Publishing.

Diyan, T. (2016). *The Nation.* Issues that'll shape retail business in 2016: http://thenationonlineng.net/issues-thatll-shape-retail-business-in-2016/. Retrieved on 23rd March 2017.

Dowall, D. E. (1993). *The role and functions of urban land market in market economies.* Kiev: Ministry of Construction and Architecture.

Efroymson, D., Ha, T. T., & Ha, P. T. (2009). *Public spaces: How they humanize cities.* Dhaka: Imex Trade.

Ehinmowo, A., & Ibitoye, A. (2010). Periodic Market, a common marketing feature in Akoko Southwest. *Journal of Geography and Regional Planning, 3*(12), 361-364.

Eko Atlantic Sales Office. (2003). *The new gateway to Africa.* Lagos: Eko Atlantic Sales Office.

El-Adly, M. (2007). Shoping malls attractiveness: a segmentation approach. *International Journal of Retail and Distribution Management, 36*, 936-960.

Fadamiro, J. (2003). Population grwoth and urban environmental quality: A challenge to open space management in Akure metropolis. *African Journal of Environmental Science*, 15-19.

Farinmade, A., & Anyakora, M. (2012). The challenge of improving informal sector activities conditions In Lagos Island, Nigeria. *British Journal of Arts and Social Science, 6*(2), 208-232.

Fourchard, L. (2010). Capital Cities in Africa:. In L. Fourchard, *Lagos* (pp. 66-82). Lagos.

Fourchard, L. (2010). Lagos. In L. Fourchard, *Capital cities in Africa: Power and powerlessness* (pp. 66-82).

Gonzalez, S., & Dawson, G. (2015). *Traditional markets under threat: Why its happening and what traders and customers can do.* Leeds: University of Leeds.

Good, C. (1976). *Markets and Marketing .* New Jersey: New Jersey Prentice-Halls Inc.

Gross, J. (2002). The "magic of the mall": an analysis of form function and meaning in the contemporary retail built environment. *Department of Geography, University of Hawaii, Honolulu*, 1-40.

Grossman, S. (2016). *The politics of order in informal markets: Evidence from Lagos.* Lagos: Stanford University.

Habitat, U. N. (2012). *Nigeria: Ifako-Ijaiye urban profile.* Nairobi: United Nations Habitat. Retrieved from http://www.unhabitat.org on 25th March 2017.

Hampton, K. N., Goulet, L. S., & Albanesius, G. (2014). *Changes in the social life of urban public spaces: The rise of mobile phones and women, and the decline of aloneness over thirty years.* New Jersey: The State University of New Jersey.

Hanington, B. &. (2012). *Universal methods of Design: 100 Ways to research complex problems, develop innovate ideas, and design effective solutions.* Retrieved from Safari Books Online: http://my.safaribooksonline.com/book/-/9781592537563/06dot-behavioral-mapping/06_behavioral_mapping

Heffner, K., & Twardzik, M. (2014). Shopping malls and its social impact on the outer metropolitan zone (The example of silesian voivodeship). *Central European Conference in Regional Science* (pp. 238-247). Katowice: Central European Conference in Regional Science.

Holland, C., Clarke, A., Katz, J., & Peace, S. (2007). *Social ineractions in Urban public spaces.* Plymouth, Great Britain: Latimer Trend. Retrieved from www.policypress.org.uk

Hosea, B. (2014). *Market Suitability Assessment of the Use of Remotely Sensed Data in The Suitability Assessment for Market Facility in Kachia LGA, Kaduna.* Kaduna: Unpublished M.Sc Thesis Department of Urban & Regional Planning, Ahmadu Bello University Zaria.

Ibrahim, A. (2012). *An Appraisal of Kaduna Central Market Redevelopment Scheme.* Kaduna: Unpublished M.Sc Thesis Department of Architecture, University of Jos.

Ihewuokwu, K. (2017). *The nigerian market place*. Retrieved from Nairaland Forum: http://www.nairaland.com/360662/nigerian-market-place Retrieved on June 5th 2017.

Ilesanmi, A. (2012). The roots and fruits of gated communities in Lagos, Nigeria: Social sustainability or segregation. *Sustainable Futures: Architecture and urbanism in the global South*, 105-112.

Istijabatul. A., Setioko, B., & Pradoto, W. (2016). The role of traditional markets as the main component of Javanese culture urban space (Case Study: The City of Surakarta, Indonesia). *The IAFOR Journal of Sustainability Energy & Environment, 3*(1), 103-120.

Jideonwo, J. A. (2014). *Ensuring sustainable water supply in Lagos, Nigeria.* University of Pennsylvania, Department of Earth and Environmental Science. Pennsylvania: University of Pennsylvania.

Joseph Rowntree Foundation. (2007). *The Social Value of Public Spaces.* Britain: Joseph Rowntree Foundation.

Khalilah, Z., Zumahiran, K., & Harun, N. Z. (2016). Sustaining the cultural vitality of urban public market. *International Journal of Architectural Research, 10*(1), 228-239.

Komolafe, G. (2016). *"The poor also must live" Market demolition, gentrification and the quest for survical in Lagos state.* Lagos: FIWON.

Kresl, E. (2012). *The importance of social spaces.* Texas: American Planning Association.

Lagos Waste Management Authority. (2016). *Data on markets in Lagos state.* Lagos: Lagos Waste Management Authority.

Lipsey, R. (1963). *An Introduction to Positive Economics.* London: Werden Field and Nicholson.

Loudier, C., & Dubois, J.-L. (2001). *Public Spaces: between insecurity and hospitality.* IAURIF.

Manhart, A., Osibanjo, O., Aderinto, A., & Prakash, S. (2011). *Informal e-waste management in Lagos, Nigeria -socio-economic impacts and feasibility of international recycling co-operations.* Institute for Applied Ecology. Lagos & Freiburg: Institute for Applied Ecology.

Mansur, A. (2004). *Design Proposals for Malunfashi Main Market, Katsina State.* Zaria: Unpublished B.URP Dessertation.

Mas, N., Thoyib, A., & Solimun, S. (2014). Trader sturdiness at traditional markets in facing modern market progress. *International Journal of Business and Management Invention, 3*(5), 49-58.

Mobereola, D. (2009). *Lagos bus rapid transport; Africa's first BRT scheme.* Sub-Saharan Africa Transport Policy Programme. Lagos: Sub-Saharan Africa Transport Policy Programme.

Musa, M. (1999). *Evaluation of Spatial Distribution of Markets in Kaduna Metropolis.* Zaria: Unpublished M.Sc. Thesis, Urban & Regional Planning, Ahmadu Bello University.

Nam, Y. J. (2011). Hanyang University, Department of Architecture. Massachussets: Unpublished Master of Architecture Thesis.

Ndi, H. N., & Oben, E. E. (2014). Space and infrastructure functionality in Yaounde market. *Journal of Geography and Geology;, 6*(2), 93-102. doi:10.5539/jgg.v6n2p93

Nwobodo, B. (2017). *Traditional markets in an era of increasing online stores.* Retrieved from BizWatchNigeria.NG: http://bizwatchnigeria.ng/traditional-markets-era-increasing-online-stores/ Retrieved on 5th May 2017

Alagbe, A.O. (2006). Urban slums in cities in developing world: A case study of Lagos state. *The Built Enironment: Innovation, Policy and Sustainable Development* (pp. 1-17). Ota: Covenant University.

Obaje, A. J. (2013). Land Management Gaps accounting for persistent open-air trading in rural markets of North Central Nigeria. *FIG Working Week*, 1-17.

Oben, F., Emmanuel, E., & Lawrence, F. (2014). Space management in traditional markets in Yoaunde municipality. *Journal of Geography and Geology;, 6*(1), 24-34. doi:10.5539/jgg.v6n1p28.

Odditycentral. (2010). *Dordoy: The Shipping Container of Bazaar of Kyrgyzstan.* Retrieved from http://www.odditycentral.com/pics/dordoy-the-shipping-container-bazaar-of-kyrgyzstan.html on 5th June 2017.

Odumosu, T. (1999). Location and Regional Setting of Lagos State. In T. Balogun, T. Odumosu, & K. Ojo, *Lagos State in Maps.* Ibadan : Rex Charles.

Oduwaye, L. (2008). Planning implications of the ethnic structure of residential areas of metroploitan Lagos. *Asian Social Science, 4*(8), 129-136. Retrieved from www.ccsenet.org/journal.html on 5th May 2017.

Oduwaye, L. (2009). Challenges of sustainable physical planning and development in metropolitan Lagos. *Journal of Sustainable Development, 2*(1), 159-171.

Oduwaye, L. (2013). Urban Planning Implications of Changing Land Use Structure of Metropolitan Lagos, Nigeria. *REAL CORP*, 1055-1065.

Ogeah, F., & Omofonmwan, S. (2013). Urban markets as a source of employment generation in Benin City. *African Journal of Social Science, 3*(4), 62-78.

Ohambele, C. C., & Maina, J. J. (In review). Comparative Analysis of Factors Influencing Shopping Patterns Between Traditional and Modern Markets in Lagos. *Journal of Environmental Sciences (JOES)*, Unpublished M.Sc Thesis.

Okoh, R. N., & Egbon, P. (2005). *The integration of Nigeria's rural and urban foodstuffs markets.* Nairobi: The Africa Economic Research Consortium.

Okwuashi, O., McConchie, J., Nwilo, P., & Eyo, E. (2008). *The challenges of urbanization.* Lagos.

Oladokun, V., & Emmanuel, C. (2014). Urban market fire disasters management in Nigeria. *International Journal of Computer Applications, 106*(17), 1-6.

Olugbenga, E., & Olukemi, O. (2013). Challenges of housing delivery in Metropoitan Lagos. *Research on Humanities and Social Sciences, 3*(20), 1-8.

Omofonmwan, S. (2013). Creation and demolition of illegal structures in Nigeria. *JORIND, 11*(1), 270-274.

Omole, F. (2002). *A spatial distribution of market centres in the development of Osun state.* Akure.

Oxford Business Group. (2017). *Hard sell: Traditional markets are slowly giving way to modern shops*. Retrieved from Oxford Business Group: http://www.oxfordbusinessgroup.com/overview/hard-sell-traditional-markets-are-slowly-giving-way-modern-shops Retrieved on the 7th June 2017

Oyelola, O., & Babatunde, A. (2008). Characterization of domestic and market solid wastes at source in Lagos metropolis, Lagos, Nigeria. *African Journal of Environmental Science and Technology, 3*(12), 430-437. Retrieved from /www.academicjournals.org/AJEST. Retrieved on 4th August 2017.

Planetizen. (2014). *10 Common characteristics of successful markets*. Retrieved from Planetizen: hhtp://www.planetizen.com/node/68364 on 20th August 2017.

PricewatersHouseCoopers. (2016). *So much in store: Prospects in the retail and consumer goods sector in ten sub-saharan countries.* Johannesburg: PricewatersHouseCoopers.

Project for Public Spaces. (2014). *Technology brings people together in public spaces after all.* Retrieved from Project for Public Spaces: https://www.pps.org/blog/technology-brings-people-together-in-public-spaces-after-all/ Retrieved on 9th July 2017.

Reynolds, K., Ganesh, J., & Luckett, M. (2002). Traditional malls vs factory outlets: Comparing shopper typologies and implications for retail strategy . *Journal of Business Research*, 687-696.

Ruiz, F. (1999). Image of suburban shopping malls and two-stage versus uni-equational modelling of the retail trade attraction: An empirical application. *European Journal of Marketing, 33*(5), 512-530.

Ryan, Z. (2006). *The good life; new public spaces for recreation.* New York: Van Alen Institute.

Sagada, M. L. (2016). Housing Development. (O. Chinedu, Interviewer)

Salau, T. (2015). Public transportation in metropoitan Lagos, Nigeria: analysis of public transport users' socio-economic characteristics. *Urban Planning and Transport Research*, 132-139.

Sanoff, H. (1991). *Visual research methods in design.* New York: Van Nostrand Reinhold.

Shakur, T., Hafiz, R. V.-A., & Cahantimur, A. (2012). Economy and culture in transitions: A comparative study of two architectural heritage sites of bazaars and hans of Bursa and Dhaka. *Archnet-IJAR: International Journal of Architectural Research*, 1-18.

Singh, H., & Sahay, V. (2012). Determinant of shopping experience: Exploring the mall shoppers of national region (NCR) of India. *International Journal of Retail and Distribution Management, 40*, 235-248.

Sisulowati, K. D. (2014). The impacts of modern markets to traditional traders (A case in Malang city, c6y Indonesia. *International Journal of Technical Research and Application, 2*(8), 38-44.

Sit, J., Merrilees, W., & Birch, D. (2003). Entertainment-seeking mall patrons; The missing segments. *International Journal of Retail Distribution Management, 31*(2), 80-94.

Soladoye, O., & Oromakinde, O. O. (2013). Assessment of tree planting efforts in Lagos Island local government. *Environment and Natural Resource Research, 3*(4), 12-18. doi:10.5539/enrr.v3n4p12

Solaja, O., Atolagbe, A., & Soyewo, G. (2013). Hausa firm presence and market social structure of some selected grocery markets in Ibadan and Lagos Metropolis. *Research on Humaities and Social Science, 3*(20), 45-54.

Suryadamar, D., Poesoro, A., Budiyatu, S., Akhmadi, & Rosfadhila, M. (2007). *Impact of Supermarkets on traditional marketsand retailers in Indonesia's urban centres.* Jakarta: SMERU Research Institute.

Terano, R., Yahya, R. B., Mohamed, Z., & Saimin, S. b. (2015). Factor influencing consumer choice between modern and traditional retailers in Malaysia. *International Journal of Science and Humanities, 5*(6), 509-513.

The Authentic. (2016). *Lagos State Social Security Exercise and Population Figure.* Retrieved from Lagos State Government: http://www.lagosstate.gov.ng/c/portal/layout?p_1_id=PUB.1095.7 on 25th May 2017

The Ford Foundation. (2003). *Public Markets as a Vehicle for social integration and upward mobility.* New York: The Ford Foundation.

Today Newspaper. (2016). *Nigeria's economy and the threat of incessant market fires.* Retrieved from Today newspaper:

https://www.today.ng/opinion/125580/nigerias-economy-threat-incessant-market-fires on 21st January 2017.

Tomori, M. (1997). *The Role of Local Governments in the Development and Management of Real Properties.* Ibadan : Codat Publications.

Tracey-White, J. (1999). *Market Infrastructure Planning: A guide for decision makers.* Food and Agricultural Organization. Rome: Food and Agricultural Organization. Retrieved January 12, 2017.

United Nations Department of Public Information. (2016). Africa Renewal: Africa cities of the future. *30*(1).

United Nations Habitat. (2016). *Public spaces and sustainable urban development.* Quito: United Nations.

United Nations University. (2017). *Infrastructure, services and housing.* Retrieved from United Nations University Website: http://archive.unu.edu/unupress/unupbooks/uu26ue/uu26ue0j.htm on 5th May 2017.

Watson, S., & Studdert, D. (2006). *Markets as Sites for Social Interaction: Spaces of Diversity.* Bristol: The Policy Press.

Yang, S.-H., Monteiro, D. S., Chan, M.-Y., & Woods, T. (2016). Preference for meat labelling in Taiwanese traditional market: what do customers want. *Journal of Food Distribution Research, 47*(1), 50-56.

Appendix

Questionnaire Template

Good day Sir/Ma, my name is Ohambele Chinedu a Master's student of Ahmadu Bello University, department of Architecture, Faculty of Environmental Design. I am undertaking a research on **"fusing the qualities of traditional and modern markets in the design of a hybrid market for Eko Atlantic City, Lagos, Nigeria."** I promise you that whatever information you provide here would be used solely for the purpose of this research and nothing else. Thank you.

Demographics

Age: below 20 ☐ 21-25 ☐ 26-30 ☐ 31-35 ☐

36-40 ☐ 41-45 ☐ 46 and above ☐

Nationality: Nigerian ☐ foreigner ☐ others, _____

Tribe: Hausa ☐ Igbo ☐ Yoruba ☐ others, _____

What languages do you speak: _____
monthly

Role: buyer ☐ seller ☐ others, _____

Sex: male ☐ female ☐

Educational level: Pri. school ☐ Sec. school ☐ .Sc. ☐

Diploma ☐ M.Sc. ☐ Ph.D. ☐

How often do you come to the market/supermarket:

everyday ☐ once in a week ☐ twice in a week ☐ ☐

once in two weeks ☐ annually ☐

Market case

Please tick one from each column that you have visited:

Markets
Balogun Market ☐
Tejuosho Market ☐
Igboshere Market ☐

Malls/Supermarket
Maryland Mall ☐
Ikeja Mall ☐
Lekki Mall ☐

User's perception

When you come into the market, asides the goods, buyers and sellers; what else do you like about the market?

_____
_____
_____
_____

When you come into the mall, asides the goods, buyers and sellers; what do you like about the mall?

_____
_____
_____
_____

Market/Supermarket Qualities

Please fill appropriately on how important the listed attributes is to the market/supermarket. The following questions have boxes from 5 to 1; **5=very important; 4= quite important; 3= important; 2=less important; 1=least important.**

Level of Importance in Market					QUESTIONS	Level of Importance in Mall/Supermarket				
5	4	3	2	1		5	4	3	2	1
					Moving from one place to the other within the market/supermarket					
					Finding what you are looking for in the market/supermarkets					
					Buying and selling upstairs in the markets/supermarkets					
					Obvious entrances into the markets/supermarket					
					Obvious exits out of the markets/supermarket					
					Adequate parking area for cars in the markets/supermarkets					
					Proximity of similar sellers in the market/supermarket					
					Size of shops in the market/supermarket					
					Room for independent good storage for each shop within the market/supermarket					
					Fire extinguishers in each shops within the market/supermarket					
					Waste disposal within markets/supermarkets					
					Availability of toilet facilities within the market/supermarket					
					Proper drainage within the markets/supermarket					
					Public waiting area within the market/supermarket					