

GSJ: Volume 9, Issue 5, May 2021, Online: ISSN 2320-9186 www.globalscientificjournal.com

AN ARCHITECTURAL APPROACH TOWARDS IMPROVING LIVABILITY CHARACTER IN MIXED-USED FACILITY

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ABSTRACT

There are numerous urban problems that cannot be addressed in a single use facility in Nigeria the emergence of Mixed-use facility is a function of demand and necessity regardless of location. Descriptive case studies of existing situations were disbursed revealing that mixed-use facility were strictly designed to produce a piece and live situation with no regard for human-building relationship performance. coaching of contemporary architects to infuse culture and pattern of social behavior of the possible occupants, the providence to relish what's procurable in cities, redefining of areas through livability character principles were counseled to reinforce the human-building performance in mixed-use facility. The paper counseled that the approach toward rising livability character like natural parts that embrace, green area, garden and flowers, ought to be inspired within the style of mixed-use facility even though they're artificial. except for the fact that they encourage livability among the building, they conjointly function as shading devices and system which may create the users/occupant snug whereas conjointly articulating the façade. however, should be correctly maintained and proper orientation should incline to the users on their importance and maintenances.

Keywords: Mixed use facility, livability character,

1.0 INTRODUCTION

Due to this economic worsening and high population density in African particularly in River state, Nigeria there's would like for additional mixed-use facility. It's thus necessary for the voters to measure, work and search in proximity (walking distance) to most residents and be snug. The insufficiency of vacant land for construction thanks to demand or necessity particularly within the central city district wherever there's large demand for business areas revealing mixed-use facility could be a key feature within the development of our fashionable cities. it is equally vital to emphasize that Mixed-use facility 'designers pay most of their time and energy on the outside look of those buildings with very little of the practicality thought of interior areas. We have all been concerned in social interactions throughout our lives although we tend to don't sometimes see them with such title. creating choices regarding wherever to measure, choosing children's college, deciding whether or not to conceive or not, involving in social services, learning from one's peers and classmates, and naming one's baby result from social interactions continually occurring in residential areas, at colleges and work (loannides, 2014). Since individuals living in a very bound town square measure really very important urban parts, from that cities absorb their vitality, militarization neighborhoods with searching centers, providing services, developing diversity, mixed uses, and making opportunities square measure among characteristics of a valued town. Also, of the foremost vital wants for cities to flourish and thrive is to assemble most of the voters in neighborhoods of town centers, as a results of that a lively, dynamic, or in different words, a 24-hour town is yielded (Kopackova et al 2019). In recent decades, rise of urbanization aspects, and formation of a new urban development scale have caused fashionable cities and urbanization to face new challenges as well as increase in social disorders, attenuation social identity and happiness, and generally shriveled quality of life (Montgomery et al 2013). Also, integration of performances, functions, and activities to create environmental unity and various areas such as semi-private, semi-public, and public are regarded as the major background for social relations and interactions (Kashfie, 2012, p. 7). The overall goal of mixed-uses facility is to improve citizen's social welfare and health, which can be achieved in some ways like integrating and combining living and work environments with each other, and also removing single-function city areas (Downs, 2005). however, to intensify that mixture uses works best once it grows out of a thoughtful arrange. The aim is to redefine public areas among mixed-use facility through livability character principles. And associate the subject area style which will help facilitates human building performance by introducing livability character because it relates to mixed-use facility.

2.0 THE CONCEPT OF MIXED USE

The primary objective of mixed-used development is to boost distance from operating place and residential whereby folks will live, work and do completely different activities inside a confirmed atmosphere.it scale back journey needs and make livability and friendly neighborhoods. The mixed used aims at comb 3 or additional uses into one structure, it brings along many uses inside either one building or atiny low space like cultural, diversion, residential, transportation, commercial etc..Employing completely different and varied uses in work and living environments at varied levels of human communities such as integration retailers, offices, apartments, and homes in one web site, establishing mixed-uses in an exceedingly neighborhood, block, or a building, diversity of people with varied ages and incomes, cultures, and races ar of high significance in new urbanism. Adopting mixed-use method leads to urban space turning into additional active, higher security and safety, and will increase social interactions, decrease in daily journeys (between work and home), as a result of that traffic is reduced and horizontal development of town is additionally prevented (Asgharzadeh Yazdie, 2011, p. 50).

2.1 LIVABILITY CHARACTER OF MIXED USE BUILDINGS

Livability is describes as an urban ability to provide and sustain a quality of life for all of its inhabitants. Livability evolves out of a wealth of existing resources and conditions that promote healthy living, such as water, soil and clean air, Good schools, convenient shopping, safe community spaces and secure infrastructure all play an important role in making an urban and building a success and livable. Livability within a mixed use building could be attributed to some qualities of lives that makes inhabitant of such buildings lively. Such qualities include amount of space provided, the level of facilities provided, conditions that promotes healthy living such as places of relaxation and recreation, factors that support social interaction and sporting competitions, elements of street life within the building.

Livability in design of buildings can easily be achieved by carrying out the following:

- Provision of adequate contact with the surroundings (view).
- Provision of a healthy environment (freshness of air, hygiene).
- Increase the benefit and means of enjoying the natural agents (daylight, sunlight, natural ventilation, greenery and soft edges).
- Provision of comfortable (thermal and visual) spaces to work, to rest and live in order to conduct our daily activities.

3.0 METHODOLOGY

A research is controlled by the nature of the inquiry. The research problem, the type of data required, the resources available, and the accessibility to the source of data are also similarly affected. The data varieties are essential to analysis as a result of the influence of the conclusions draw. The analysis technique adopted during this research is descriptive case study analysis strategies. it's empirical inquiry that investigates a recent development among its real-life context, once boundaries between development and context aren't clear, and within which multiple sources of proof are used. Descriptive case study approach was chosen to clarify the present situation. This facilitate to justifiably portray and analyze the present events and their relationships.

3.1 Source of Data

In this research, primary and secondary sources of data collection were adopted. The primary source of data collection involves the direct observation of a mixed-use facility, while the secondary source of data exploits the review of some works done on the subject taken from both published books, journals, articles, papers all from official documents of some professional bodies

3.2 Study area:

Greater harcourt is a metropolitan area currently under construction in River State, Nigeria. it comprises the fellowings local government area: Obio-Akpor, Etche ,Omumma,Oyigbo,Eleme,Okirika,Ogu- bolo,and port harcort city .It covers an area of approximately 1,900 km2 (734ml2) and as of 2009 has a population of two million people. This study will provide sustainable solution to the distances between residential areas and employment centers. and its related issues in greater port Harcourt city and contribute towards improving the standard of living, working and shopping within proximity (walking distance) in the neighborhood through livability character.

4.0 Criteria for Appraisal of Case Studies

The case studies are appraised based on outlined considerations in the 'Neufert Architects Data: 4th

Edition', the 'Design Objectives of Whole Building Design' (Prowler, 2009) and 'Architectural Design: Theory and Design', (Rao, 2009). These considerations include the following

- 1. Location: Viability as to whether the project is properly situated
- 2. Accessibility: This involves consideration for ease of reach or access for the users
- 3. **Building Character/ Visual Access:** Concerned with how easily the physical structure relates with its purpose of use, making it easy to identify.
- 4. **Site Circulation and Movement:** Considers the organization and planning of vehicular, cycling and movement routes within the site, as well as user/customers and service/delivery routes.
- 5. **Orientation/ Layout:** it involves the positioning of structures or facilities on site in response to certain natural elements and conditions.
- 6. Safety and Security: Provisions for avoidance of crisis situations and emergencies.
- 7. **Functionality and Comfort:** To what level does the project satisfy or fulfill the purpose for which it has been built, while providing the required comfort for users particularly in response to natural factors (e.g. Lighting, ventilation, shelter, sanitary needs, and emergency).

4.1 CASE STUDY 1

TINAPA BUSINESS AND LEISURE RESORT, CALABAR, CROSS RIVER STATE, NIGERIA.

4.2 Description:

Tinapa is a business and leisure resort just north of Calabar, Cross River State, Nigeria associated with the Calabar Free Trade Zone. It is being developed in four phases under a Private Public Partnership (PPP) promoted by the Government of Cross River State. The resort is located by the Calabar River, contiguous with the Calabar Free Trade Zone. It has top-notch facilities for wholesale and retail trade as well as Entertainment and Leisure. It has a children's arcade, an eight Screen Cinema, shopping mall, A water park, Hotel, Mini Amphitheatre, Restaurants and Pubs. It is a great place for a family vacation.



Plate 4.1: AREA VIEW SHOWING OTHER BUILDINGS Source: Author 2021



Plate 4.2: EXTERIOR VIEWS SHOWING LANDSCAPE AND WATER BODY OF FACILITY Source: Author 2021



Plate 4.3: EXTERIOR VIEWS Source: Author 2021



4.3 CASE STUDY 2: FREEDOM PARK

FREEDOM PARK, #1 HOSPITAL ROAD, OLD PRISON GROUND, BROAD

STREET, LAGOS ISLAND, LAGOS, NIGERIA.

4.4 Description:

Freedom Park Lagos, born out of the ruins of Her Majesty's Broad Street Prisons, was reconstructed to preserve the history and cultural heritage of the Nigerian People. Freedom Park Lagos is a National Memorial, a Historical landmark, a Cultural site & an Arts and Recreation Centre. Freedom Park is a Memorial and Leisure Park dedicated to the preserving the Lagos colonial heritage and history of the Old Board Street prison.



Figure 1: SIDE VIEW OF FREEDOM PARK SHOWING Its LANDSCAPE

Source: Google Images, 2021



Figure 2: AERIAL VIEW OF FREEDOM PARK

Source: Google Images, 2021



Figure: 3: AERIAL VIEW OF FREEDOM PARK SHOWING Its LANDSCAPE

Source: Google Images, 2021

5.0 Conclusion

As the population of River state increase there is need for mixed use building to help cater for the growing population and maximize land usage and tends to mitigate traffic and sprawl. The essence of mixed-use development is that it brings individuals nearer to the items they have on a regular basis therefore reducing time spent traveling. Mixed-use tend to assist with efficiency manage the accessible land area and public infrastructure. However, Special attention should tend to include livability character into such buildings joined of the most effective ways that in reducing the, boredom, loneliness and stress and enhance effects of building performance on the standard of living.

5.1 Recommendations

The use of natural components like trees, flowers, inexperienced space and garden ought to be inspired within the style of mixed-use facility (buildings) even though they're artificial. except for the fact that they encourage livability among the building, they conjointly utilize on elevations as sun shading and system whereas conjointly articulating the façade. This but, should be correctly maintained and proper orientation should lean to the users on their importance and maintenances.

Also, in introducing livability character in mixed use building area. invulnerable area depends on resident involvement to scale back crime and take away the presence of criminals inside a building. Since different activities are happening at different hours of the day. this may facilitate in reducing crime and additionally bring folks of various incomes and race along in a very mutualist union.

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