How Art and Architecture Influence Hotel Façade Design Automation

Abstract:- Hotel is a commercial institution that renders guests and travelers with two important services: shelter and cuisine (food and drinks) in return for monetary profits. Since guest are travelers and/or excursionist, the security of their lives and properties security is important also provision of comfort while in the hotel is important. Hence, hotel are constructed, with preferences to location, and other distinguishing factors for different goals and type of client, with the thought of hospitality.

Architecture, art and integration of an automation system have always had a big impact on the way the world looks, how it makes us feel, and how it tells our memories. In the hotel industry, façade is an important, beginning and an overview of the experience that lies ahead of guests inside. It cannot be emphasized how important art, architecture and automation system are to a hotel's façade because they set the tone for the entire guest experience. A dramatic remark about the hotel's character, culture, and values is made by the combination of artistic elements and smart architectural design, which goes beyond simple aesthetics. This article examines the significant effect of art, architecture and automation system on hotel façades, emphasizing how these elements may attract onlookers, establish brand identity, reflect the context of culture, captivate visitors, help marketing initiatives, and merge in effortlessly with the immediate environment. By exploring the significance of these artistic components, the numerous ways that architecture, art and automation system influence how people perceive and interact with hotels will be understood and ultimately transforming them into iconic piece and memorable settings.

Keywords:- Local Art, Work Of Art, Artifacts, Iconic Structures, Historical References, Artistic Expression, Architectural Aesthetics, 3D Modeling, Visualization Software And Building Information Modeling (BIM).

I. INTRODUCTION

A hotel is a temporary accommodation created for monetary reward. It is mostly on a short-term basis. Hotel is a French derived word that is similar as Inn, meaning a stop-over place for travelers who intend to rest and continue their journey afterwards. It was originally created from the thought of goodwill and hospitality but with advancement, and hoteliers meeting the satisfactory conditions of customers, it was commercialized and more public and private spaces were provided and it left the original idea as a room-to-let. Rumekso (2002) states that hotel is a building providing rooms, food and beverage for customer with returns of temporary payment per service as benefits. This symbolizes hotel as a building own by a person or group of companies or business entity that affords the services of accommodating, feeding and providing other services and commodities for its intending customers, individuals, excursionists, researchers, people or visitors, whether for when there is a overnight, day stay or for those who only use the service facilities provided like gym facilities, recreational facilities like restaurants, swimming pool, music and groove spots and multipurpose conference halls. According to Sulastiyono (2007), hotel is seen as an accommodating structure that gives the facilities as rooms, food and beverage and other specific and supporting facilities such as recreation, laundry and sport area to intending customers. Customer delight is measured as the amount of extra efforts taken by an organization so as to deliver satisfaction as a pleasurable experience for its client, (Patterson, 1997). By this, it details stronger emotion and considering different physiological state in a pursuit to deliver satisfaction. It is important to consider the impact of visual and acoustic designs in the hotel designs. According to Asdrubali, Schiavoni, Horoshenkov (2014) & Ulrich (1992) backed this as art and architecture and the needs for designs that aids more emotional and physiological reactions to natural spaces thus serving as a stress reduction theory (SRT) and poised no harm to the natural environment but providing a scenic views towards the building, landscape etc., to clients. Architecture is a social art form serving the basic need of habitants’ life shelter. One unique and innovative idea in modern architecture is the use of technology to design and construct buildings in accordance with their environments. Buildings may be made perfect and faultless by the exact and suitable application of technology. Therefore, Lovell and Jenny (2010) propose that a wise use of automation combined with indigenous civilization can address today's architectural difficulties. The World Tourism Organization defines tourism more generally, in terms which go beyond the common perception of tourism as being limited to holiday activity only, as people traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure and not less than 24 hours, business and other purposes. In 2018 Dubai, with a population of 9,630,959 made a GDP of over 414 billion US Dollar and over 98% of this was gotten from industries and services only, which is tourism from all the iconic and
monumental edifices in Dubai, resorts, beaches, bars and luxury life attributed to the Arabsians. Intensive venturing into these industries art and architecture and services tourist operator, entertainment, and rentals gave the country a gross external debt dropped to 237.6 billion in 2018. The nature of architecture, its technological and cultural ramifications on the tourism industry can never be over emphasized. It elucidates the background of issues regarding the interaction between the fields of cultural production that is art and architecture also cultural consumption tourism. Automation is becoming increasingly relevant in the field of hotel facade design. With the use of software and other technologies, architects and designers can create more intricate and unique facades with greater efficiency. Automation also allows for a higher degree of precision and accuracy in the design process, which can result in more visually appealing and structurally sound hotel facades.

II. UNDERSTANDING THE RELATIONSHIP BETWEEN ART AND ARCHITECTURE

Identification to a style of art in a community and also passing it on to the next generations is very important. Works of art are artifacts of a kind from a raw idea which in turn brings a new reaction when shown to the world. Art is the conscious production or arrangement of sounds, colors, forms, movements or other elements in a manner that affects the senses and emotions usually specifically the production of the beautiful in a graphic or plastic medium. African art are works of art that draw inspiration and incorporate elements of African culture into things. This includes dance, folktales, visual art, music, literature, theater, and others. African art is diverse and encompasses a wide range of styles, techniques, and media. It includes traditional art forms, such as masks, sculptures, and textiles, as well as contemporary art, which reflect the changing social, political, and cultural landscape of Africa. Architecture which is the art and science of planning, designing and constructing, through distinguished skills is of utmost importance as man evolves. Architecture creates a story with (series of) spaces. With respect to population, Nigeria in today’s world is one of the fastest growing nations. With about 200 million persons based on estimation and an annual growth rate of about 3.2% (National Population Census, 2006). Aside this interesting increase in population, there is a fast raising in urbanization but still, about 72% of the Nigerian people are still in the category of being poor, (National Population Census, 2006). With this, there are problems of basic amenities of which is housing. Architecture as a profession and an architect as a fellow (humans) with the environment is now saddled with the task to build housing units of low cost and derivative housing units depending on the preferences and financial capability of the client.

III. THE INFLUENCE OF ARTISTIC AND ARCHITECTURAL IMPRESSION ON HOTEL FACADES

Around our natural space, people continuously relate with infrastructure and the natural environments by making or siting facilities in ways it can best suite them for comfort, storytelling and better study and duplication. Obadiah, (2012) stated that the interaction between man and his environment can either have negative or positive effect from man to the environment or vice versa, therefore there is a purpose for sustainability through maintenance; this assures a huge benefit of man and his interaction with the environment (Beata, 2018).

The relationship between art and architecture specializes in architecture, urban planning, and art history by this; it can be seen as a symbiotic one. The relationship between art and architecture is a complex and multifaceted one that has received a great deal of attention in the research circles. Architecture has often been viewed as a form of art, and many architects have been trained in artistic disciplines such as sculpture, painting, and drawing. Olakunle (2014) examined the integration of art and architecture in traditional Yoruba building design, by this, exploring the use of decorative motifs and the symbolism representations of architectural forms. By this, many artists have used architecture as a source of inspiration, incorporating architectural elements into their work or creating site-specific installations that interact with the built environment. One area of research that has received significant attention in recent years is the intersection between art, architecture, and urban planning. This research often focuses on the ways in which public art and urban design can be used to create more livable, sustainable cities. According to Uduku & King (2005), this explores and interplays between traditional Nigerian art forms and contemporary architecture, important for cultural identity and symbolism in the field of art and architecture.

Kola (2010) opined the importance of urban landscape in Lagos, exploring the relationship between contemporary architecture and public art, and studying the ways in which the city’s art and architecture reflect its cultural and social diversity. Meaning the role of public art in fostering community engagement and the impact of architecture on urban form have received a great deal of attention in academic circles and physical implications beyond aesthetics but functionality and transition. Another area of research that has received significant attention is the relationship between architecture and technology. As new materials and construction techniques have emerged, architects and artists have been quick to incorporate them into their work. This has led to a growing interest in the ways in which technology can be used to create more sustainable, energy-efficient buildings.
The role of art and architecture on building facades is important in shaping the visual identity of a building or structure and the immediate environment. A sense of place, expression of culture and historical importance, and conveying the identity and purpose of the building is achieved. Artistic and architectural elements incorporated into a building’s facades in numerous ways.

![Conceptual Framework of the Influence of Art and Architecture on Hotel Facades](image)

**Fig 1:** The Conceptual Framework of the Influence of Art and Architecture on Hotel Facades. Source: (Jabloriska et al., 2022)

IV. VARIABLES FOR IS ART AND ARCHITECTURALLY CONSCIOUS

The artistic approach used in modern resort hotel design is a factor supporting the global hotel sector. This force tends to encourage human response, a system that illustrates how people accept development through their thoughts (mind), remedies for this, as well as designs based on sustainability through active and passive structural design, and integrating technology with local structures and materials to aid in a better built environment (Clarke, 2005).

The relationship between art, architecture, and visitors' impressions of hotel quality is explored in the book "Art and Architecture in Hotels: A Study of Guest Perceptions" by Song et al., 2012.

There are various variables taken into account in order to determine whether a hotel is aware of art and architecture, such as the following:

A. **Design and Architectural Style**

The hotel's layout and style of architecture might reveal whether or not it is art and architecturally savvy. Be on the lookout for imaginative and distinctive architectural components (walls, roofs, foundations, windows, and doors, for example), the use of regional materials (thatch, sandcrete, earthwork, adobe, etc.), as well as the incorporation of practical sustainable design and natural light to help enhance the hotel's aesthetics.
B. Artistic elements
   A hotel that is art and architecturally concerned may have artistic aspects on its front. This can contain unique artwork, installations, famous paintings, sculptures, collages, or murals that have been thoughtfully and purposefully chosen and positioned to complement the hotel's overall design and architecture.

C. Sustainable practices
   Sustainable practices may also be a sign of a hotel's attention to design and the arts. This covers employing recycling systems, renewable energy sources, and eco-friendly materials in the building and upkeep of the hotel.

D. Integration with the local culture
   This can be utilizing regional artwork or conventional building methods that reflect the local culture and community acceptability.

E. Guest experience/Guest review
   According to "The Importance of Art and Architecture in Hotel Design" by Dittrich ( ). In order to improve the guest experience, this article examines the significance of incorporating art and architecture into hotel design.

   The way that guests are treated might reveal whether or not a hotel is interested in art and architecture. Hotels that provide one-of-a-kind, immersive experiences that are intended to increase visitors' understanding of the artwork and architecture on the hotel exterior should be sought out.

F. Landscape
   The concept of the soft landing and hard landscaping or vegetation is crucial. It need to be a component that enhances the facade's overall beauty.

V. FACTORS AFFECTING THE DEVELOPMENT OF ARTISTIC IMPACT ON BUILDING FACADES

   Artistic impact on building facades can be affected positively or otherwise by the following factors:

A. Urban Environment
   Building facade artwork can be influenced by the local urban environment and its features. To make sure the creative features of the facade complement and enhance the overall attractiveness of the region, considerations such nearby structures, street layout, and overall urban design may need to be made.

B. Cultural Context
   The way that art is mirrored on the building facades of a community is greatly influenced by its culture. Regional customs, historical influences, and individual aesthetic preferences can have a big impact on the choice of artistic forms, themes, and subjects.

C. Function and Purpose
   The use and purpose of a structure may have an impact on the artistic impact on its façade. To reflect its goal, a cultural center might have vibrant and expressive elements, whereas a government building might have a more formal and imposing design.

D. Architectural Style
   The architectural style of a building may have an impact on the design choices selected for its facade. For different architectural styles, it could be required to use particular design elements, materials, or ornamental techniques that complement the overall architectural language.

E. Budget and Resources
   The finances and resources at hand can also have an impact on the artistic impression on building facades. The materials selected, the artwork's scale, and the degree of detail may all be influenced by the project's financial constraints.

F. Artistic Vision and Expertise
   The creative vision and technical know-how of the project's designers, architects, and artists are crucial components. Their creative abilities, acquaintance with a variety of artistic styles, and technical know-how all play a role in how successfully the artistic impression is realized on the building outside.
VI. THE IMPORTANCE OF NIGHT LIGHT DESIGN IN HOTEL FACADE

The design of night lights is essential for improving the appearance and experience of a hotel front. It not only makes a welcoming atmosphere to the hotel, but it also has practical and useful functions. The following are some major justifications for why hotel facade night light design is crucial:

A. Visual Appeal

The aesthetic appeal of a hotel front can be substantially improved by a well-designed night lighting arrangement, making it stand out and draw interest. A visually appealing facade that matches the building’s architectural style can be made by architects and designers by applying various lighting techniques, such as up lighting, down lighting, and accent lighting. By highlighting architectural elements, textures, and materials with the proper fixtures, colors, and intensities, visitors and bystanders can be left with an unforgettable and enthralling impression.

B. Energy Efficiency and Sustainability

Energy efficiency and sustainability should also be given top priority in nightlight design. It is crucial to use energy-efficient LED lighting fixtures, integrate lighting controls like timers or sensors, and reduce light pollution. Hotels may lessen their impact on the environment and save money on energy bills while still maintaining an attractive and welcoming nighttime appearance by implementing sustainable lighting strategies.

C. Branding and Identity

The hotel brand image and personality might be reflected in the way its front is illuminated at night. A distinctive and easily recognized landmark in the environment can be created for the hotel by combining its logo, colors, or other distinguishing characteristics into the lighting design. This strengthens the hotel's identity in the minds of current and potential guests and helps to build a strong brand presence.

D. Mood and Atmosphere

The mood and ambience of a hotel are significantly influenced by the lighting. A desired mood can be produced with the appropriate arrangement of lighting sources, color temperatures, and intensity levels, whether it's a warm and welcoming feeling for a boutique hotel or a lively and vivacious vibe for a contemporary restaurant. As visitors approach or take in the hotel facade from a distance, night lighting has the power to arouse feelings, set the mood, and produce unforgettable experiences.

E. Wayfinding and Safety

In order to maintain safety and aid visitors in finding their way around, night lighting is essential. Visitors can easily navigate the hotels outside, even in low light, thanks to properly illuminated paths, doors, and signs. Accidents can be avoided, visitors can be directed to the main door or reception area, and security can be felt thanks to well-designed lighting. Additionally, emergency exits and other crucial safety elements should be illuminated to make sure they are visible at night.

In conclusion, the design of a hotel's night lights is crucial since it affects the building's overall aesthetic appeal, branding, safety, mood, and sustainability. A thoughtfully designed lighting plan may leave a lasting impression on visitors, enhance the hotel's brand, and provide a cozy and secure atmosphere.

VII. SOME CASE STUDY HOTELS IN AKURE

Some of the numerous hotels visited while compiling this research are as follows;

Case Study One: Eleventh House Hotel And Suites

It is situated in Alagbaka, Akure, Ondo State. The expressway coming from the state's internal generated revenue office is just next to it. It is situated on a landmass and has walls that are painted a dove gray emulsion and corrugated roofs that are either deep or dark gray in color. In order to create the impression of a mixed texture, emphasis was also made on some areas of the wall that were finished with brown wall tile and yellow paint. To further separate the tinted windows from the walls, the concrete fascia, columns, window borders, and window panels are all painted white.

Regular brick walls with iron barriers on top serve as the building's fences, which are no longer than 2100 meters.
Case Study Two: Continental Hotel, Akure

It is situated in Akure, Nigeria, across from the Nigerian Immigration Office, along Alagbaka Extension, Igbatoro Road. It is built of a slab roof that covers an all-yellow structure with white side paintings to go with the blue painted wall that celebrates and draws attention to the hotel entrance. This seems to suggest that the hotel has distinctive signage that is symmetrical in appearance. The Continental Hotel has 4 stories and is a 2-star establishment. With the subject wall painting, the fences are pretty straightforward. It is a distinctive building in Akure's Ijapo neighborhood that can be seen from a distance.
Case Study Four: St Jacobs, Alagbaka

It features a colored corrugated roof. Its barriers are built of lowered walls with steel door- and window-locking. It is at Block 1, Plots 7A and B, off Leonac Junction, in Akure, Ondo State's Alagbaka GRA, Akure. References to it can be found by the windows, and the five-story hotel building's white and sky-blue wall painting is finished with a stylish brown roof. The surrounding area consists primarily of hard landscaping used as parking.
Fig 6 Bird View of the Hotel
Source: Google (2019).

Fig 7 An Art Impression (Mural) on the Wall of the Hotel
Source: Author’s Fieldwork, (2023).
Case Study Five: Royal Birds and Towers, Alagbaka

It features a colored corrugated roof. Its barriers are built of lowered walls with steel door- and window-locking. It is situated at Alagbaka, Akure, Ondo state, along Royal Birds Road. It is close to the highway. The architecture is traditional, with sandcrete block walls covered in paintings of milk and blood, lacking a roof. The hotel features rectangular rooms throughout, but the entryway is circular, which highlights how different it is to enter the structure. Additionally, windows are crucial to the hotel's façade because they are repeated across the entire seven-story structure. This construction site's location on a hill, where it can be seen from a distance as one approaches it, is another important aspect.
Fig 10 The Rear View of the Hostel from the Pool Side

Fig 11 The Night view
Source: Google, (2023).

VIII. COMPUTER AIDED ART AND ARCHITECTURE

In recent years, automation has become an increasingly important tool in the design of hotel facades, especially with the use of software like AutoCAD and Revit. The integration of computer systems in the design of hotel facades has revolutionized the way that buildings are created, allowing for greater creativity and efficiency in the design process. Architects and designers can create complex and detailed designs with a high degree of precision. This has allowed for more intricate and visually appealing facades, while also reducing the time and cost of the design process. However, some have raised concerns about the potential for automation to lead to a lack of creativity or personalization in design. Despite these concerns, it is clear that automation has had a significant impact on hotel facade design. The use of automation in hotel facade design has allowed for the creation of complex and intricate designs that were previously impossible to achieve. For example, the facade of the Burj Al Arab hotel in Dubai was designed using advanced computer modeling techniques (Al-Sehail, 2014). The result is a breathtaking design that would not have been possible without the use of automation. While some critics argue that this type of design lacks the human touch, others...
believe that it opens up new possibilities for creativity and innovation. The Burj Al Arab is a great example of how computer systems have been integrated into the design process for large-scale architecture projects. In the case of the Burj Al Arab, architects and engineers used computer systems throughout the design process, from concept to construction (Bahaj et al., 2008). They used 3D modeling and visualization software to develop the design, and they also used Building Information Modeling (BIM) to coordinate all of the different systems and components of the building. This integration of computer systems allowed the designers to explore different ideas and create a building that would not have been possible without the use of technology, the specific benefits of using computer systems in the design of hotel facades is that it allows for greater accuracy and precision in the design. The use of CAD and BIM programs allows for very precise measurements and calculations, which results in a more accurate and detailed design. Another benefit is that it allows for faster and easier revisions. Changes can be made quickly and easily in the software, without having to redraw everything from scratch. This saves time and money in the design process. it’s clear that the use of computer systems in the design of hotel facades has had a significant impact on the field of art and architecture. Computer systems have allowed for greater accuracy and precision in the design process, faster and easier revisions, and more creativity and innovation. Overall, the use of computer systems has helped to revolutionize the way that hotel facades are created, and it has opened up new possibilities for designers.

IX. RECOMMENDATIONS & CONCLUSION

It is recommendable that hotels incorporate art, architecture and automation into its facade design. In today’s world, the exterior design of a hotel plays a crucial role in attracting and retaining guests. By adding visual appeal through the use of art, architecture and computerization, one can enhance the overall guest experience and make your hotel stand out in the market. Art and architecture can be used in many different ways to create unique and striking facades for hotels. For example, incorporating local materials and cultural elements into the design can give guests a sense of place and help them connect with the local community. Similarly, using abstract or modern art can provide a sense of sophistication and intrigue, setting the hotel apart from its competitors. Furthermore, the use of art and architecture can help to create a welcoming and memorable arrival experience for guests. Eye-catching designs and unique features can engage guests and inspire them to explore the hotel further. This can help to create a positive first impression and encourage repeat visits. This study therefore makes recommendation from the final results and deduction for study and further research.

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