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Evaluation of location of cosmetic customization in public buildings in South-West Nigeria

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Abstract

The categorization of public buildings is such that it covers all buildings that are accessible to the public; however, many public buildings that are either fully or partially privately owned usually undergo some form of cosmetic customization in an attempt to communicate the aspirations of the owners or occupants of the building or the space within the building to the users. This paper aims to examine the location and aspects of the buildings that are affected by cosmetic customization as they relate to the occupants and owners of the buildings. The study adopted mixed methods of qualitative and quantitative research approach, it used both a questionnaire and observation checklist to obtain data from the selected buildings and the respondents. Eleven public categories of public buildings were selected and 30 copies of the questionnaire were administered to each category. The data was analyzed using descriptive statistics from SPSS software and the results are presented in tables and charts. It was observed that a high percentage of the customization was undertaken within the building and the ceiling aspect of the interior was the most modified part of the building. The study concluded that cosmetic customization was undertaken in all of the public buildings examined, and this action helped project the image the owners wanted to put forward as their form of brand identity using the building.

Keywords: Building, Cosmetic, Customization, Identity, Public

Introduction

Public buildings are a common feature in all urban areas of any country and they vary in design, construction, and utilization; however, the common principle is that they are accessible to the general populace with minimal restrictions aside from security checks. According to Adilovna [4], public buildings play an important role in any city be it rural or urban area because they help to create an avenue for the general population to gather, given that they are designed for multipurpose functions such as cultural, educational, or even commercial purposes. According to Ikpo [24], generally, it is the public authorities like the government at whatever level that undertake the

development of public buildings for the profit of its citizens, hence any member of the society can access it. Commercial buildings could also be categorized as public buildings as long as they offer access to the general public in an unrestricted manner as opined by Adhitama and Komatsu [2]. The design and construction of any public building is always done in such a way to reflect a certain image or culture of the owners or the society, however over time these buildings tend to deteriorate and require maintenance or remodeling. The need to create buildings that meet the current society's judgment of beauty is always a contributing factor that drives architects and building owners, particularly in the built environment and this drive has no end [21]. It is common to hear that beauty which is a product of good aesthetics in a building is defined as subjective, however, this does not stop the populace and building owners from demanding beautiful buildings. It is common to observe that governments often pay less attention to achieving beauty when they have the opportunity to renovate their buildings [12]. An examination of public buildings that are either owned or leased by private individuals to run public services seems to always be concerned about the beauty of their buildings and this is often reflected in the renovations or remodeling undertaken on these buildings. Customization offers a unique opportunity for the buildings to be remodeled or upgraded to reflect the aspirations of the owners or operators of the building. Mass customization has become an integral part of the building industry as many actors have keyed into this strategy [18, 25, 27]. There are four approaches towards the adoption of customization in the built environment and the selection of any is based on the goal sought by the stakeholders involved in such task [5, 8, 16]. The common customization that can easily be observed in public buildings in Nigeria is cosmetic in that it focuses on the building's appearance without affecting the structural aspect of the building. These modifications vary based on several factors and the location of these changes is often driven by the owners or operators of the building. The modifications that occur while buildings undergo renovations allow the building owners or operator to create some form of identity that was hitherto thought missing or requires reinforcement. The idea is to ensure that these buildings can be easily identifiable based on the identity they create. There are cases where the building is used as a form of branding for the specific company or individual that owns or runs their business within the premises. This is probably why it is easy to identify certain businesses right from the appearance of their buildings even when they offer the same services as other businesses or companies. The process that allows for companies or businesses to achieve an identity and unique brand to meet certain parameters can be described under the concept of customization because customization is broad and applicable to various fields of endeavor. The general idea of customization is to meet the needs and aspirations of different individuals or companies and these acts are visible to the end users or public. The location of the modified elements of the buildings is key to achieving the aim of the building owner or operator because they could define the identity or nature of branding achievable in the building. The location refers to the aspect of the building that was modified which either be the interior space or the exterior space even though it

could be a similar type of building element. This paper seeks to examine the location of cosmetic customization changes in some selected public buildings to determine which areas of the buildings are most affected by such changes.

Identity in public building

Public buildings are referred to as a public organization that deals with various functions and focus on ecumenical services for the whole citizenry, for example, town halls, banks, schools, hospital, churches, and secretariats complexes [34]. It can also be referred to as a building where diverse activities are executed and not necessarily the ownership status of the place that dictates the public status of the space [43]. This infers that public buildings are buildings that are open to the public to make use of. Public buildings serve the purpose of governance and the provision of services to the governed however, they are not possessed by the government, rather they are communal property that makes it easier to convey services to the public and helps improve the livability of cities [28].

Public buildings play a prevailing role in rural and urban centers, as they marry all sections of the population by projecting the personality, morals, and beliefs of the societies they serve. The conservation of these buildings as cultural and historical heritages is a vital feature of brand identity in a community [15, 33]. Most often, these buildings use their design as a form of identity of earliest beliefs of where they are located. These historical and cultural buildings are always presented in such a way that the identity and the brand of the people or time they represent are preserved even during reconstruction. This is critical, as these buildings express the customs and revolutions of towns and cities, and are therefore likely to precisely imitate the philosophies, priorities, and drives of the citizenry [38]. Public building not only serves people aiming to go there but also serves passers-by by fascinating them inside. On the other hand, public buildings reflect the asset of governmental/public wealth as they are usually deduced as expressions of political and economic power. Therefore, the quality of public buildings in a community has a direct effect on the quality of life of the people, and it is a valid indicator of the growth and advancement of the people [34]. However, the significance of public buildings is not only in their economic importance but also in their societal and traditional investments and they should function effectively throughout their lifecycle. Public buildings are usually different from each other based on the identity they create based on the architectural element involved and the design used. It is easy to identify and differentiate a court building from a church building based on the elements that give it an identity, the same cannot be said about many other public buildings as they often share similar elements that are used subjectively by the architects. The opportunity to modify a building usually presents a unique opportunity for the building owner to create an identity for themselves or reinforce an existing one.

Customization in building

The concept of customization refers to offering differentiated products without significantly increasing the price and delivery time, that is as. a means of getting personalized products at a workable price. The level of customization is concerned with the range of customization options to be offered to satisfy different customers [19]. Pine [35] identifies four methods of customization which include: Adaptive, Collaborative, Cosmetic,

and Transparent. In adaptive customization, a standard but customizable product that can be adapted by the client at use is provided [22]. The challenge with this form of customization is that it requires a longer period of study of the users of the product in this case the building. This system provides flexibility to individual customers to independently manipulate the products to suit their own needs. In collaborative customization, a discussion with the different users is conducted to assist in articulating their desires and to ascertain the defined proposals that justify such requirements [22, 29]. The most important catalyst for this method is the client's inability to make decisions on multidimensional trade-offs that occur when acquiring a mass-produced product [26]. The burden of change is often on the product provider and not the building operator or space owner which does not allow for the expected creation of identity or branding as the individuals might seek. In transparent customization, customized products are provided without explicitly letting the client identify that those products have been customized for them [22]. This approach to customization requires continuous observation of the would-be customer or building operator, like other forms of customization this equally poses a great challenge for the customers to create an identity or brand as no direct input is made by them. Cosmetic customization is the process of tailoring the same product or service for different client groups [26], this creates a unique opportunity for the end-user of the product to define what benefits can be achieved with changes made to the product and it is unique to them alone.

Customization in the construction industry is known as a manufactured by-product (building) that describes adaptive and flexible building patterns [17]. This offers the desired flexibility relative to the proposed different layout during the project phase or acceptable flexibility where the standard product is improved upon [11]. Customization of a building is defined by Adedayo [3] as any changes undertaken on a building seeking to improve the performance of such building in terms of function, aesthetics, reliability, or general performance, this definition resonates with actions taken by building owners and operators towards optimizing their buildings. Customization in the building has a lot of benefits which are not limited to increasing building performance and reducing maintenance overheads, on the other hand, it also reduces human error, eliminates waste, facilitates dismantling and recycling, and increases the lifecycle of the building [36]. It equally allows the building owner or operator to determine exactly what type of changes or modifications should take place within the building. It allows the building owners to create any identity or brand that would project the message sought by the company or individual. It is important to examine the elements of cosmetic customization that could apply to the type of buildings where such is sought. However, despite the possible contribution of customization and related principles in the housing field, its full potential has been little explored so far.

Elements for cosmetic customization

Gilmore and Pine, [22], describe cosmetic customization as changing the features of a product without changing its nature. In building, cosmetic customization can be described as customization that integrates flexibility which allows for freedom to redesign the building. The elements of the buildings could be replaced to create a unique product ranging from the roofs, the doors, the windows, and other parts of the buildings

which have varied options for selection. This customization approach is associated with flexibility that allows clients to select and modify the physical space during construction [10, 40]. This ensures that individuals are responsible for the selected changes based on their personal preferences regarding these elements and what type of identity or brand they seek to create. This initial flexibility can be supplemented by continuous flexibility, also known as posterior or functional flexibility, which represents adjustments to the physical space of the house over time. According to Vrijhoef and Ridder [41], a reasonable number of building end users worry more about their building envelopes, referring to the fact that they prefer their buildings to vary in looks than in interior spaces. Again Schoenwitz et al. [37] identified that customers have a strong desire to personalize sanitary ware, interior accessories, and facades. However, cosmetic customization allows for individual product adjustments to improve the aesthetic value which can take place by changing the color, changing the façade of the building, and other internal elements. The attempts to modify the building envelope by the owners and operators of the buildings align with the views opined by Schoenwitz et al. [37], the key factor for examination is the location where these changes occur. In some cases, the only change required could be as simple as a change of paint color or a change of floor finishes. The location of the cosmetic changes varies between the interior and exterior of the building and the elements concerned are usually not structural.

Brand identity and cosmetic customization

Cosmetic customization offers the owners of the building the opportunity to express their brand in their buildings which would serve as a quick way of identifying their building. This approach is common with banks and telecom companies as they often seek to be unique and identifiable instantly even if it is a leased building. A brand is a lasting and compelling identity that is unique and meaningful [6], while a brand identity is the unique and relatively enduring feature of a brand. Earliest researchers, define brand identity as an internal structure that represents what the organization wants the trademark to be [1, 14]. In undertaking cosmetic customization what many building owners and operators usually tend to achieve is the creation of a brand identity. The concept of brand identity begins by conceptualizing it as a dynamic process that is rooted in multiple actors, including companies and customers [13]. However, the positive feature of brand identity reflects the benefit of self-expression—expressing the identity of the consumer [1, 13]. it allows them to express their inner desires and attract specific clients or customers to their building and services while improving their public image. According to Tangney and Leary, [39], identity refers to one's ability to reflect upon oneself and become conscious of the self. One's sense of identity is one of the reasons behind the positive effects of customization [30]. People find customization, especially cosmetic customization, emotionally appealing because it helps customers shape and express their identity on a certain product in an attractive way and also allows them to develop a strong emotional connection with the customized product. Cosmetic customization of a product is often seen as a means to match one's preferences with one's identity [20, 23, 32] as it allows individuals to express their personal and collective identity to others and distinguish them from others" [7]. In examining the built environment, it

is common to observe that individual residential buildings often differ from others because customization is achieved at the design stage. In the case of public buildings where many occupants are found and no specific owner of the building, the individuals often seek to generate their expression within the confines of their space. The brand identity created is often what customers use in identifying their business premises or judging their services. Therefore, cosmetic customization is the shortest method to creating brand equity [42], as it contributes to one's sense of identity by allowing users to customize their product/s more appealingly.

Methods

Public buildings as defined in Nigeria are buildings that are accessible to the general public and these buildings could be owned by the government or private individuals. In some cases, public buildings offer commercial services driven towards profit generation and are maintained by the occupiers of such buildings. This study is part of a larger study on cosmetic customization of public buildings. The study adopted a mixed methods of qualitative and quantitative research approach using both questionnaire and observation checklist to obtain data from the selected buildings and respondents. There are 6 states within the South-West of Nigeria, 5 states were selected based on the level of development in such states which excluded Lagos State because it offers unique characteristics that are at variance with the other states. Using a purposive sampling method, 11 categories of public buildings were selected based on the frequency of occurrence, which include; include supermarkets, government administrative buildings, restaurants, hotels, petrol stations, eateries, private clinics, bookshops, electronic showrooms, events centers, and mixed-use buildings. The buildings excluded include Police stations, religious buildings, markets schools because they offered large data sizes that would make analysis cumbersome. A purposive sampling method was adopted in the selection of public buildings that have undergone customization using an observation checklist. This was done to evaluate the aspects of the building element locations for customization in public buildings. This method was adopted because it allowed for the collection of data across different groups to ensure all the public buildings were covered and therefore eliminate bias in the study. The qualitative data obtained from the field were images of the elements used for the cosmetic customization and they were captured using the camera, the observation checklist was used to gather data on the nature and location of the physical cosmetic customization undertaken on the buildings. A sample size of 330 with 30 copies of the questionnaire was administered to each category which is considered adequate for the study as established by Marshall et al. [31], The questionnaire were distributed by MSc Students of Architecture who served as research assistants for the study and they were administered to the highest ranking officer of the premises studied or the space owner. A total of 215 copies of the questionnaire were returned as retrieved by the research assistants, giving a return percentage of 65% which was considered adequate for analysis in qualitative research according to Boddy [9]. The data collected were collated and analyzed using descriptive statistics from SPSS software and the results are presented in tables and charts. In testing for the hypothesis, a Kruskal-Wallis test was used to determine the relationship between selected variables.



Fig. 1 Modification of public buildings

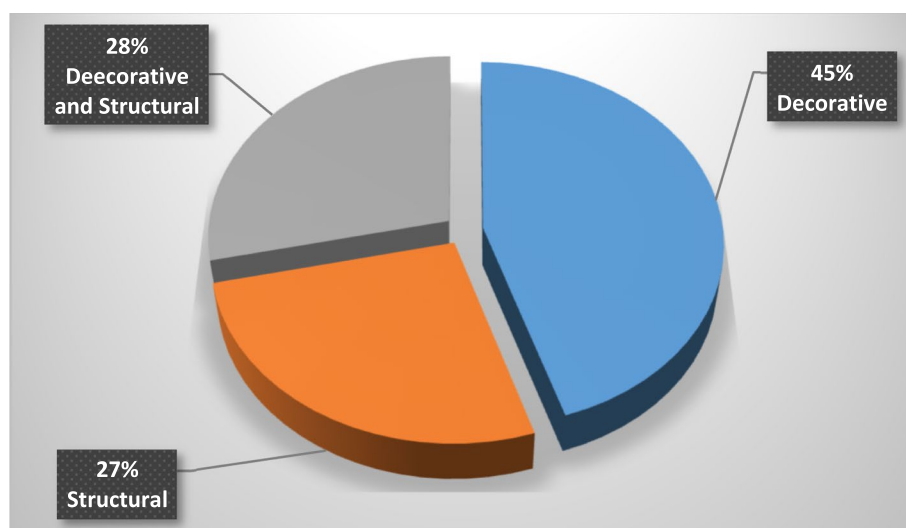


Fig. 2 Type modification was undertaken in public buildings

Results and discussion

Nature of modifications

In understanding the location of the modifications undertaken in public buildings to achieve some level of cosmetic customization, there is a need to examine the nature of the modifications done. It can be observed from Fig. 1 that 75% of the public buildings examined had undergone some form of cosmetic customization through modification. This percentage is considered high and helps to establish the fact that operators of these buildings seek to achieve some level of personalization or identity or any other driving need to stand out from other buildings or spaces. A further examination of the type of modification undertaken by public building operators/

owners in Fig. 2 shows that 45% of the modifications were decorative while 28% were a combination of both decorative and structural. The addition of the two percentage values will show that 78% of the buildings examined underwent decorative customization which is a key representation of cosmetic customization of the buildings. In Fig. 3, the summary of the location of the modifications undertaken concerning location on the building envelope shows that 50% of the buildings had modifications on both interior and exterior parts of the building. The most common modification type observed was the change of painting of the interior spaces. There were cases where the changes were those of the interior ceilings where they were changed to plaster of Paris (POP). The reasons for this level of modification were based on the nature of service being rendered within the space or buildings, it was common to observe that buildings that housed restaurants and supermarkets had more modifications at both interior and exterior parts of the buildings. Buildings that were not owned by the respondents often limited the modifications to the building interiors alone except when permission was obtained from the building owners to allow exterior decorative modifications.

Nature of modified building elements

In the examination of the building that underwent some form of cosmetic customization through modifications, nine elements in the building were modified to reflect a needed appearance by the building operators. Table 1 shows the percentage of buildings that had modifications on the elements of the building and by extension, it showed the location of these modifications. It can be observed from Table 1 that modification of the exterior wall finishes had the highest percentage of modification which was closely followed by the interior wall finishes. The reason for these high percentages could be added to the fact that these two elements offer a very large area within the building where the modifications could easily be seen and appreciated. The modification of the roof has the lowest percentage and this could be understood considering that the cost of achieving this modification can be significantly high and also

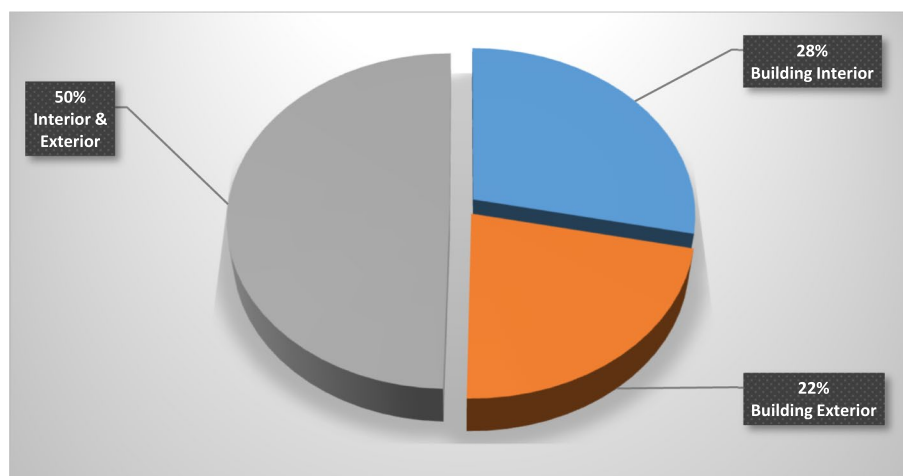


Fig. 3 Location of modification on building envelope

Table 1 Building elements modified and location

S/N	Description	Modified	Ranking
1	Modification of exterior wall finishes	63.18%	1st
2	Modification of interior wall	57.21%	2nd
3	Modification of interior ceiling	48.24%	3rd
4	Modification of interior floor	46.26%	4th
5	Modification of interior doors	45.27%	5th
6	Modification of exterior floor finishes	45.27%	6th
7	Modification of windows	43.35%	7th
8	Modification of exterior ceiling	43.00%	8th
9	Modification of roof	28.87%	9th

structurally inclined hence the avoidance by many of the respondents. In cases where the roofs were modified, they were taken as a general holistic modification as seen in some petrol stations and supermarkets examined. The interior ceilings that were modified were to reflect the desired aspirations of the space owners who needed to use recent materials that they considered more aesthetically pleasing, these changes were predominant in spaces where customers were likely to sit longer such as restaurants, pharmacies, event centers, and reception areas. These modifications align with the general principle of cosmetic customization which is the presentation of the same product in different forms without tempering with the basic structure of the building. This was even more evident when the block of shops was examined as different spaces had different interior appearances yet they all had the same structural configuration.

Table 2 Hypothesis test summary of the significance of the relationship between building category and nature modification

S/N	Null hypothesis	Sig	Decision
1	The distribution of the type of modification made is the same across categories of building category	.084	Retain the null hypothesis
2	The distribution of the location of modification made is the same across categories of building category	.000	Reject the null hypothesis
3	The distribution of modification of roof is the same across categories of building category	.008	Reject the null hypothesis
4	The distribution of modification of interior ceiling is the same across categories of building category	.000	Reject the null hypothesis
5	The distribution of modification of interior floor is the same across categories of building category	.000	Reject the null hypothesis
6	The distribution of modification of interior walls is the same across categories of building category	.000	Reject the null hypothesis
7	The distribution of modification of window is the same across categories of building category	.000	Reject the null hypothesis
8	The distribution of modification of interior doors is the same across categories of building category	.000	Reject the null hypothesis
9	The distribution of modification of exterior ceilings is the same across categories of building category	.000	Reject the null hypothesis
10	The distribution of modification of exterior floor finishes is the same across categories of building category	.003	Reject the null hypothesis
11	The distribution of modification of exterior wall finishes is the same across categories of building category	.020	Reject the null hypothesis

Relationship between nature of modification and building category

In examining the location of these cosmetic customizations, the need to determine the relation between specific variables that could affect the nature of the modification undertaken on the public buildings was established. Using the Kruskal–Wallis test which is a non-parametric test and considering that the data generated by this study fit the assumption for this test, 11 null hypotheses were stated as shown in Table 2 and tested against the building category variable. Using a significance level of $P=0.05$, it can be observed from Table 2 that the null hypothesis of “*The distribution of Type of modification made is the same across categories of Building Category*” has a P value of 0.084 which is greater than 0.05 hence the decision to retain the hypothesis. A further examination of the other hypotheses in Table 2 reveals that all the p values are less than 0.05 hence the decision to reject the null hypotheses. It further shows that there is a significant relationship between the building category and the specific location of these modified elements in the building. The findings corroborate what is observable from the field study where the modifications were usually individual-based and did not have any generic order as aesthetics could be considered as being subjected and its expressions would be different.

Relationship between nature of modification and building type

There are different building types in the public building category and they offer different opportunities for cosmetic customization and the degree of modifications required to achieve the desired modification could vary. It can be observed from the summary of the hypothesis in Table 3 that P values across the variables examined were above 0.05 which is indicative of retention of the stated null hypothesis. The specific modifications regarding the individual elements were not examined as the broad action of modification was

Table 3 Hypothesis test summary of the significance of the relationship between building type and nature modification

S/N	Null hypothesis	Sig	Decision
1	The distribution of the type of modification made is the same across categories of building type	.565	Retain the null hypothesis
2	The distribution of the location of modification made is the same across categories of building type	.187	Retain the null hypothesis
3	The distribution of modification of roof is the same across categories of building type	.201	Retain the null hypothesis
4	The distribution of modification of interior ceiling is the same across categories of building type	.628	Retain the null hypothesis
5	The distribution of modification of interior floor is the same across categories of building type	.095	Retain the null hypothesis
6	The distribution of modification of interior walls is the same across categories of building type	.740	Retain the null hypothesis
7	The distribution of modification of window is the same across categories of building type	.452	Retain the null hypothesis
8	The distribution of modification of interior doors is the same across categories of building type	.179	Retain the null hypothesis
9	The distribution of modification of exterior ceilings is the same across categories of building type	.209	Retain the null hypothesis
10	The distribution of modification of exterior floor finishes is the same across categories of building type	.279	Retain the null hypothesis
11	The distribution of modification of exterior wall finishes is the same across categories of building type	.509	Retain the null hypothesis

the focus of the study, hence the finding that the modifications were the same across the variables that defined the nature of modifications undertaken.

Relationship between nature of modification and space utilization

The utilization of space or building could affect the nature of the modification undertaken in the study. There were cases where similar spaces were modified differently because of the services rendered by the shop owners or the image sought to be projected to the customers and visitors. It can be observed from Table 4 that most relationships indicated in the hypothesis summaries had P values that were above 0.05 which meant that the hypothesis in each case was retained. However, the hypothesis in serial number 2 had a p value of 0.04 and the decision was to reject the hypothesis, this is indicative of a significant relationship between the space utilization and the location of the modifications and this is in agreement with what was observed on the field. The decision to reject the null hypothesis in serial number 3 with a p value of 0.045 shows that there is a significant relationship between the modification made on the roof and the space utilization. This is considered key especially when the driving factor for the cosmetic change had to do with the creation of a certain appearance and in cases where the building was not purpose-built or the function of the building had changed. Some of the changes observed regarding roof modifications, it was a case of changing roofing materials without changing the roof structure.

Relationship between the nature of modification and building design

Architects usually try to express the aspirations of their clients when they undertake a building design commission, it is, therefore, natural to expect that the buildings will

Table 4 Hypothesis test summary of the significance of the relationship between space utilization and nature modification

S/N	Null hypothesis	Sig	Decision
1	The distribution of the type of modification made is the same across categories of building space utilisation	.950	Retain the null hypothesis
2	The distribution of the location of modification made is the same across categories of building space utilisation	.040	Reject the null hypothesis
3	The distribution of modification of roof is the same across categories of building space utilisation	.045	Reject the null hypothesis
4	The distribution of modification of interior ceiling is the same across categories of building space utilisation	.378	Retain the null hypothesis
5	The distribution of modification of interior floor is the same across categories of building space utilisation	.066	Retain the null hypothesis
6	The distribution of modification of interior walls is the same across categories of building space utilisation	.677	Retain the null hypothesis
7	The distribution of modification of window is the same across categories of building space utilisation	.071	Retain the null hypothesis
8	The distribution of modification of interior doors is the same across categories of building space utilisation	.088	Retain the null hypothesis
9	The distribution of modification of exterior ceilings is the same across categories of building space utilisation	.188	Retain the null hypothesis
10	The distribution of modification of exterior floor finishes is the same across categories of building space utilisation	.585	Retain the null hypothesis
11	The distribution of modification of exterior wall finishes is the same across categories of building space utilisation	.234	Retain the null hypothesis

always satisfy the yearns of the clients and the users. It is however not the case sometimes when the users or operator of the spaces cannot be determined at the commencement of the building or there is a change in use or a change in materials due to adaptation of technology or later developments. In Table 5, you will observe that of the 11 hypotheses stated 7 had P values less than or equal to 0.05 which is indicative of a significant relationship hence the decision to reject the null hypothesis. An example of the significant relationship is observable in serial numbers 7 and 8 where the p values were 0, a further check will reveal since windows are a significant part of the building design it is easy to understand why modifications on this particular element would be different across the building categories and the changes would differ greatly. The changes in the interior doors also showed a similar trend because of the impression doors create with the interior spaces hence the level of significance expressed in the measurement of this hypothesis. It is observed from the hypothesis summary that the level of relation between building design and modification is quite high because any cosmetic customization has a direct impact on the building design. There were cases where the building design limited the level of cosmetic customization that could have been achieved in public buildings such as Petrol stations.

Relationship between the nature of modification and nature of service

A key reason for cosmetic customization is believed to be the services rendered (utilization) by the occupants of the space or the building and this factor affects the image and brand created by the building owner. In Table 6, the hypothesis related to the ceiling of the building interior had a p value of 0.008 which is less than the p value of 0.05 which is required to show if there is a significant relationship between the two variables. The

Table 5 Hypothesis test summary of the significance of the relationship between building design and nature modification

S/N	Null hypothesis	Sig	Decision
1	The distribution of the type of modification made is the same across categories of building design	.050	Reject the null hypothesis
2	The distribution of the location of modification made is the same across categories of building design	.001	Reject the null hypothesis
3	The distribution of modification of roof is the same across categories of building design	.420	Retain the null hypothesis
4	The distribution of modification of interior ceiling is the same across categories of building design	.020	Reject the null hypothesis
5	The distribution of modification of interior floor is the same across categories of building design	.124	Retain the null hypothesis
6	The distribution of modification of interior walls is the same across categories of building design	.128	Retain the null hypothesis
7	The distribution of modification of window is the same across categories of building design	.000	Reject the null hypothesis
8	The distribution of modification of interior doors is the same across categories of building design	.000	Reject the null hypothesis
9	The distribution of modification of exterior ceilings is the same across categories of building design	.022	Reject the null hypothesis
10	The distribution of modification of exterior floor finishes is the same across categories of building design	.027	Reject the null hypothesis
11	The distribution of modification of exterior wall finishes is the same across categories of building design	.143	Retain the null hypothesis

Table 6 Hypothesis test summary of the significance of the relationship between the nature of service and nature modification

S/N	Null hypothesis	Sig	Decision
1	The distribution of the type of modification made is the same across categories of nature of service	.460	Retain the null hypothesis
2	The distribution of the location of modification made is the same across categories of nature of service	.002	Reject the null hypothesis
3	The distribution of modification of roof is the same across categories of nature of service	.000	Reject the null hypothesis
4	The distribution of modification of interior ceiling is the same across categories of nature of service	.008	Reject the null hypothesis
5	The distribution of modification of interior floor is the same across categories of nature of service	.053	Retain the null hypothesis
6	The distribution of modification of interior walls is the same across categories of nature of service	.036	Reject the null hypothesis
7	The distribution of modification of windows is the same across categories of nature of service	.251	Retain the null hypothesis
8	The distribution of modification of interior doors is the same across categories of nature of service	.143	Retain the null hypothesis
9	The distribution of modification of exterior ceilings is the same across categories of nature of service	.033	Reject the null hypothesis
10	The distribution of modification of exterior floor finishes is the same across categories of nature of service	.021	Reject the null hypothesis
11	The distribution of modification of exterior wall finishes is the same across categories of nature of service	.688	Retain the null hypothesis

ceiling modifications offered the building owners and space owners the opportunity to create a beautiful space within and also opportunities for lighting designs to suit the aim of the business. It is appropriate to reject the null hypothesis indicated in Table 6 and careful examination of these rejected hypotheses is indicative of the observed changes from the field study. There were cases where some respondents stated that they made changes to the building's appearance because of the kind of services they were providing and that the initial design decisions did not suit their service provision. The painting of interior walls varied greatly across the building categories and it is observed in Table 6 serial number 6 that the p value of 0.036 is indicative of this observation hence showing that there is a significant relationship between the variables.

Conclusions

The study revealed that the location of the modifications which is indicative of the customization undertaken in the public buildings were varied even when the owners sought to achieve a similar aim. The study reflected the different approaches used by the respondents towards creating cosmetic customization within the interior and exterior spaces of their buildings or spaces of leasing. It can be observed from the study that in the future when public buildings such as those examined are constructed certain elements should be left at the discretion of the occupiers or owners who can remodel them to their desires. Ranking of the aspects of the building that had high levels of modification showed that walls ranked higher with the exterior walls ranking highest which showed that the outward appearance of the building was key in the cosmetic customization of the building. In the test of hypotheses, mixed relationships were observed across the five summaries examined, however, it was observed that the type of services offered in the building had a significant relationship

with the nature of modification undertaken which determined the location of the cosmetic customization. Customization of public buildings is not a wrong occurrence rather it is an expression of the aspirations of owners of the building or the spaces within the building. The building owners and operators will always have the desire to express themselves differently from what the architect or the building manager hitherto expected or assumed they would act; hence, this particular building adaptation style should be accommodated. The appearance of a public building says a lot about the nature of services and the image of the building and its operators or owners hence the need to always ensure that building elements used in their construction are such that allow for flexibility towards achieving customization. It is recommended that in designing and constructing public buildings architects and the building team seek to create opportunities for cosmetic customization in the buildings by not fixing rigid fitting or finishes that could hinder the expression of customization by the building owners which they would naturally seek to achieve for individual reasons. The adoption of cosmetic customization in public buildings helps to create a cultural identity and preserve the heritage of the building or its people depending on which is the basis for the modification. It is common to refer to certain cities based on the significant buildings found in such communities and as such buildings have created an identity associated with them, the same can be achieved using cosmetic customization.

Abbreviation

SPSS Statistical Package for Social Sciences

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Authors' contributions

Adedayo, O.F. was responsible for the analysis of data and the discussion of the results and conclusion. The overall structure of the paper was developed by him. Ale, A.T. was responsible for the literature review section of the paper and parts of the conclusion. Yahaya-Loko, N.M. was responsible for data collation and the "Introduction" section of the paper. Adekunle, V.S. was responsible for the coding of the data into the software and data collection and proofreading of the paper. I wish to further state that all authors have read and approved the manuscript submitted for consideration.

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Availability of data and materials

The data generated and used for this study was obtained from primary sources and was duly analyzed by the authors. The data is not bound to any copyright of any organization or establishment. Data can be shared upon request at any time decided by the editor(s).

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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