

Evaluation of Architectural Design and Property Management in Kano Metropolis, Kano State, Nigeria

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Abstract: The level of maintenance governs the health of a building and its durability. To facilitate easy maintenance, several components of a building should at the design stage be given careful consideration. The aim of this study is to evaluate the architectural design and show the effect it has on property management, using Kano metropolis as a case study. In attaining this, questionnaires were administered to 23 Estate surveyors and only 16 were retrieved. Interviews were also conducted amongst them. It was found out that a defective architectural design had a great challenge in property maintenance. Therefore, for a good maintenance culture and an optimum return on property, estate surveyors and valuers should be involved at the design stage for opinion and should not be left only to the hands of the architects.

Keywords: design-related, estate surveyors, property maintenance, property owner, Kano

I. Introduction

Property management is an applied management discipline that focuses on the application of the knowledge of management on real properties. Thorncroft (1965) defined property management as the direction and supervision of interest in properties with the aim of securing an optimum return which might not be in terms of financial return. Expected returns from property investment depend on the expectation of the investor. This is further buttressed by Oladokun & Ojo, (2012), who refer property management as an act of intermediation between owners and occupiers on issues affecting the parties arising from ownership and occupation of buildings. It is a conscious process of guiding and tailoring an investment in land into profitable venture. The main concern in management property is the maximisation and optimisation of owner's investment for an optimum return.

Oladokun and Ojo (2012) further explained that the global collapse of the capital market with its attendant effects, in the economy of most countries including Nigeria are seen to be compelling investors to re-direct their investment ventures into real estate. Property managers advise the client concerning the general client policy regarding cooperation and compensation and so as to the best and appropriate choice of tenants for the building. He takes decision on the best term of lease arrangement and appropriate terms of renewal. In addition to this, he should be informed as rapidly and thoroughly as feasible about laws, proposed legislation, government regulations, public policies and current market conditions.

However, the overall management of a property that is being carried out by a professional property manager is tasking and not only signing of leases and collection of rent. In reality, the property manager's job is far more complex and demanding. It includes determining the possible and probable gross income, budgeting the expense, stunt the tenants, maintain the typical condition of the building, determine the rental policies, and keep the building in repair.

Property management like any other field of management is characterised with a lot of problems and these problems can be attributed to different causes. Problems like the relationship between the property owner or his representative and the tenants, bad selection of tenants, rent default and the rest of them. A notable cause of property management problem is also faulty architectural design which this study intends to cover. This is also corroborated by other scholars. Osasona, (1998) asserted that to easily maintain the appearance, functionality and the overall structural integrity of a building, it depends on a number of design-related issues, such as the scale of the project, the design layout, wall height and ceiling profile, specific design feature etc. Property manager in the construction industry, turns the investment of his client (i.e property), into cash. If he is not able to do this diligently, then he will be regarded as lacking in his professional responsibility. Converting a client's investment into cash involves series of factors and these include location, design, size, demand and finishing to mention but a few. For example a 5-bedroom flat having only one convenience and no wardrobes in the bedrooms would bring down the rental value of such property. Also getting a good tenant for such property would be difficult.

The design of a building will not only have effect on the environment, cities and people which authors have shown from the aforementioned discussions but also maintaining building components so as to prolong its life time and securing appropriate tenants that will accept the condition of a building is a major issue which this study intends to fill. The aim of this paper therefore is to identify issues and problems associated with maintenance as a result of design defects and design related issues, to examine

the importance of a good architectural design for practitioners managing real estate, and examining good design on property as a means of revenue generation. It is believed that this study will enlighten the architects, Estate Surveyors and Valuers and the other professionals in the construction industry.

II. Conceptual Framework and Literature Review

Millhouse, 2005 discussed that architecture and quality design is inputs of space that are demanded by the developers so as to supply high-quality design space to users. This discussion can be likened to the fact that a poor architectural design results to a waste of space. A space in good location with poor design will limit the demand of such property and the value of such property will be reduced. It is obvious at this point that an Estate Surveyor and Valuer will be affected in any default in architectural design. An Estate Surveyor and Valuers helps the investor in realising the optimum returns expected from his investment. Millhouse further argued that a market failure occurs when there exists a gap between the levels of quality design demanded by the users of the space.

A good architectural design increases the property values of the neighbourhood property. It creates a sense of community and provides a catalyst for future development. Imagine a tastefully finished six-bedroom bungalow in the heart of GRA with a design default, e.g having only one convenience, no parking or lock-up garage, no wardrobes in the bedrooms etc, will have a negative impact both on the investor and the neighbourhood. It will limit the calibre of people expected to stay in such property.

One frequently experiences different forms of architectural defects in property management in Kano metropolis, such as the of the ceiling, size and shape of property, basic facilities required of a building, etc.

Using professionals in the construction industry might seem to be a luxury from the architects, builders, quantity surveyors and finally estate surveyor may seem to consume more capital at the initial stage but to a rational investor, it saves cost, time and gets the optimum returns on his investment. An architect brings a whole lot more to the table, expertise in coordination, knowledge of building precedents and expert advice that brings a different perspective to a builder. This is likened to the fact that professionals in the construction industry work as a team and bring independent perspectives in advising the clients on what he desires. Olateju, (1999) believes that maintenance as a service covers every aspect of the building environment, particularly building assets and infrastructural facilities. Such facilities spread across projects in several sectors of the nation's economy which include agricultural, health, education, commerce, industry etc. The spread also extends to social sectors such as roads, water supply, housing, electricity and telecommunication. It is noteworthy that such projects have implications for regular maintenance for sustainability.

Property management according to Gross, 1969 defines it as the branch of real estate composed of renting, supervising, collecting, paying and the overall maintaining and managing of real estate for others. Real estate with a good architectural design will aid in getting the properties suitable tenants for rent. A property with a default design, results in delay of getting returns (income), reduction in the rental value and bad maintenance culture. An estate surveyor and valuer is in a better position to advice both the architect and the client the consequences of bad design to property management. Property management is to secure maximum return on investment to the investors. If all the strategies in property management is carefully taken into cognisance, then a conducive and tenantable accommodation will be available for owners and occupiers.

The types and size of housing in (Nigeria) cities constitute a big problem; most of the houses lack the basic requirements. The dimension of rooms, living rooms and kitchen are issues that are alarming in most properties now. It is possible that aesthetically, some buildings might appear pleasing but it will not yield the income expected from it. Most of them lack basic amenities such as bath tubs, appropriate lamination, the required number of conveniences, parking space and general circulation. Property owners need to be well informed and oriented even at the design stage and before the commencement of construction. Most of them are only concerned with what is beautiful in the visual world. This is in line with Read's (1977) statement that "Any general theory of art and aesthetics must begin with the supposition that man responds to the shape and surface and mass of things present to his senses and that certain arrangements in the proportion of shape and sensation, while the lack of such arrangements leads to indifference or even the positive discomfort and revulsion".

From the above discussions, it can be inferred that in securing of dwelling houses it is the responsibility of the various participant in the construction industry ranging from the design and construction professionals to the skilled craftsmen. The design of a building which in turn affects the materials, construction (including workmanship), function and the use will determine the amount of maintenance required during the lifetime of the building. In conclusion, if a well trained estate surveyor is involved at the design stage of construction, he would have made an intelligent and constructive contribution and the problems of property maintenance would have been reduced.

III. Study Area

Kano is the largest city in Northern Nigeria. It has a population of 9,383,682 with 44 local Government area (according to the 2006 census), giving it a busy atmosphere. It is the major Industrial centre of the North. The city has long been known for its leather work and their tanned goatskins were sent to North Africa and were known in Europe as Morocco leather. As one of the seven Hausa city- states, Kano's written history dates back to AD 999, when the city was already several hundred years old. It was a cultural, handicraft and commercial centre with wide trade contacts in West and North Africa. It was created on May 27, 1967. It borders Katsina State to the north-west, Jigawa State to the north-east, Bauchi State to the south-east and Kaduna State to the South-west.

Impressive infrastructural facilities such as Mallam Aminu International airport and road and rail links to other parts of the country as well as excellent road network within the state provide unique opportunities for the steady growth of commercial activities (www.nigeria.gov.ng/2012).

IV. Materials and Methods

The study population is primarily the Estate Surveyors and Valuers in Kano state, who are heads of firms or heads of agency and management departments. The questionnaire was completed by these heads of departments. Efforts were made to optimise the questionnaire before distribution. It was reviewed severally to avoid any misunderstanding of questions. All the Estate firms in Kano state are located in the metropolis. The questionnaires were distributed to 23 registered estate surveyors and valuers firms out of which only 16 responses were retrieved, (representing 69.5% response rate).

In addition to the questionnaires administered to the estate surveyors and valuers, interview was also conducted amongst them. The interviews with the estate surveyors solicited for answers to issues relating to the regular complaints from the tenants, challenges mostly faced with their management property and whether the complaints are design related.

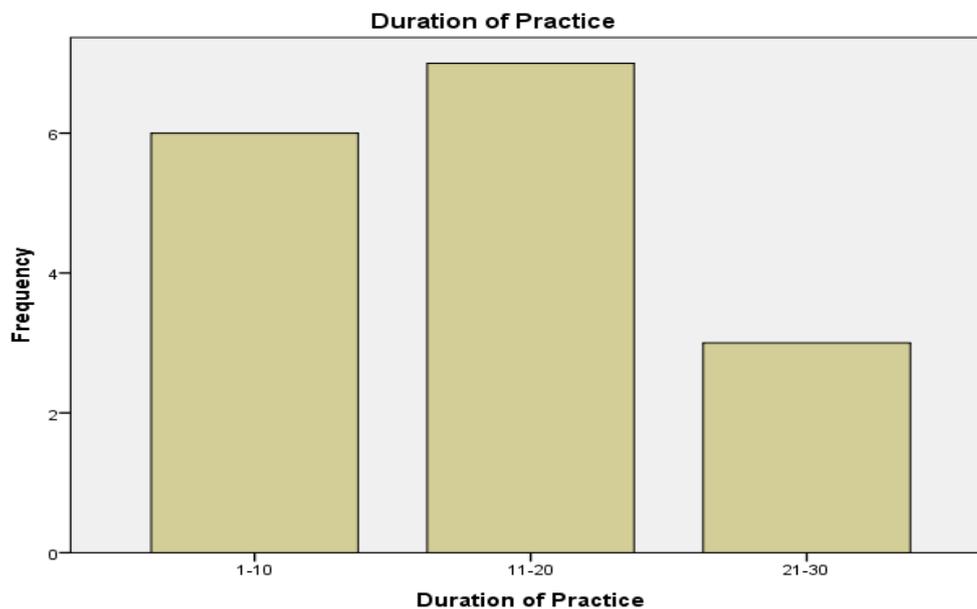
The sampling method employed is the convenient analyses and comparing variables which the study requires. Descriptive statistics in form of tables and theoretical analysis were adopted.

V. Results and Discussion

Table 1: Duration of Practice.

Duration of Practice				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-10	6	37.5	37.5
	11-20	7	43.8	81.3
	21-30	3	18.8	100.0
	Total	16	100.0	100.0

Source: Field survey, 2015.



The frequency column reports that 7 of the respondents which is equivalent to 43.8% of the total number of respondents have had between 11 and 20 years in practice. 6 of the respondents which is equivalent to 37.5% of the total number of respondents has had approximately between 1 and 10 years and 3 respondents which is equivalent to 18.8% of the total number of respondent has had between 21 and 30 years in practice.

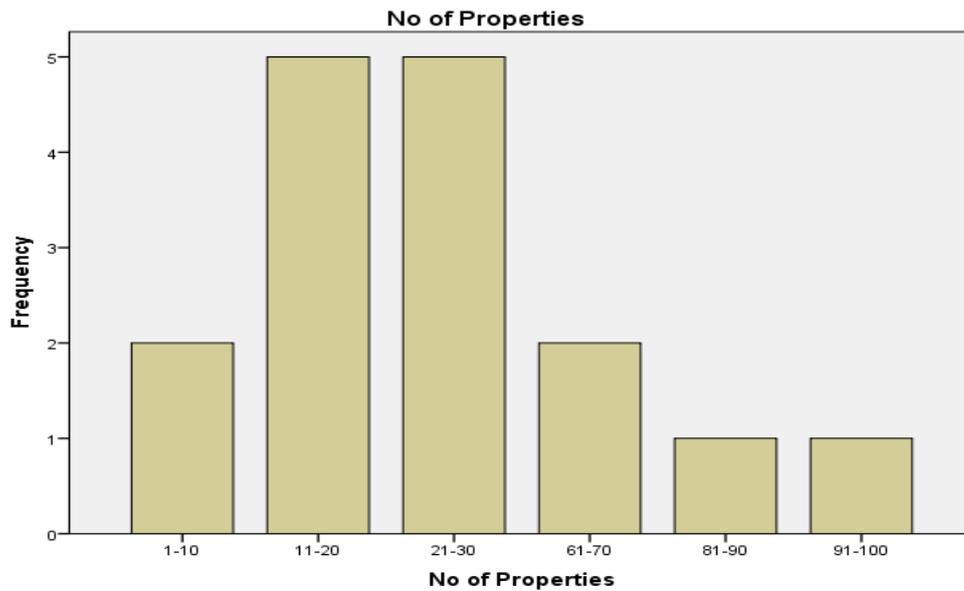
It can be inferred from this table that one can rely on the responses of the estate surveyors and valuers based on the years of experience has shown in the table above.

Table 2: Number of Management Properties

Number of Management Properties

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-10	2	12.5	12.5	12.5
11-20	5	31.3	31.3	43.8
21-30	5	31.3	31.3	75.0
61-70	2	12.5	12.5	87.5
81-90	1	6.3	6.3	93.8
91-100	1	6.3	6.3	100.0
Total	16	100.0	100.0	

Source: Field survey, 2015.



10 respondents, which is equivalent to 62.6% of the total number of respondents manages between 11 and 30 management properties. 7 respondents which is equivalent to a total of 43.8% of the total number of respondents manage between 1 and 20 management properties.

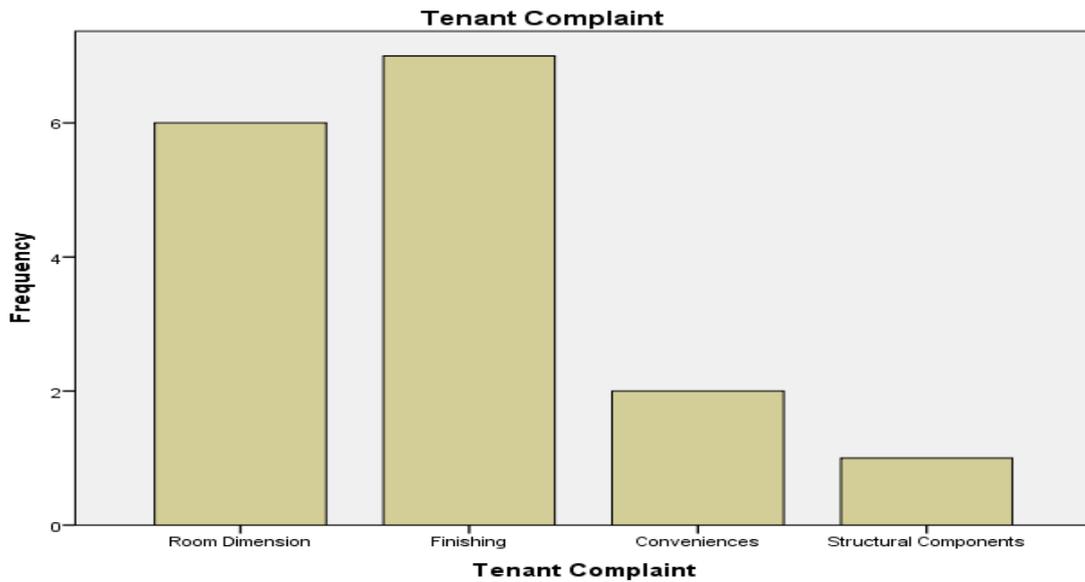
2 respondents which is equivalent to a total of 12.9% of the total number of respondents manage between 81 and 100 management properties.

It can be inferred from this that the respondents have wide range of experiences because they are exposed to many properties and would have been conversant with property management challenges.

Table 3a: Regular Complaints of Tenants

Tenant Complaints				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Room dimension	6	37.5	37.5	37.5
Finishing	7	43.8	43.8	81.3
Conveniences	2	12.5	12.5	93.8
Structural components	1	6.3	6.3	100.0
Total	16	100.0	100.0	

Source: Field survey, 2015.



7 of the respondents which is equivalent to 43.5% of the respondents identified Finishing as the major complaints from tenants on their management property. Other complaints made by the tenants occupying various management properties include;

- Room dimension 6 (37.5%)
- Conveniences 2(12.5%)
- Structural Components 1(6.3%)

Table 3b: Design Related Problems (case summary)

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Design problem	16	100.0%	0	0.0%	16	100.0%

a. Dichotomy group tabulated at value 1.

Design Problems

	Design Problem	Responses		Percent of Cases
		N	Percent	
	Room Dimension	5	10.4%	31.2%
	Space	10	20.8%	62.5%
	Damping Wall	5	10.4%	31.2%
	Finishing	8	16.7%	50.0%
	Structural Components	6	12.5%	37.5%
	Surrounding Spaces	2	4.2%	12.5%
	Conveniences	6	12.5%	37.5%
	No locked up garages	3	6.2%	18.8%
	Height of Ceiling	3	6.2%	18.8%
Total		48	100.0%	300.0%

a. Dichotomy group tabulated at value 1.

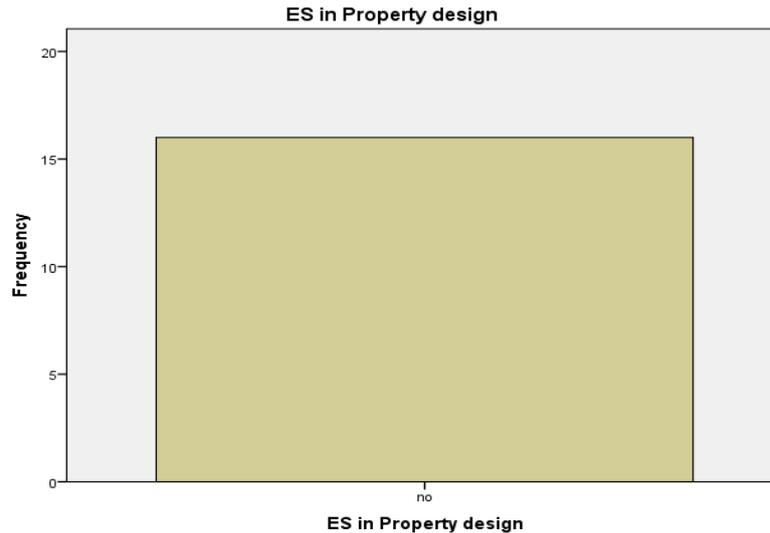
16 respondents mentioned at least one design problem. The 16 respondents gave a total of 48 responses, which is approximately 3 design problem mentioned per person. Space and finishing was the most frequently mentioned design problems by the respondents, with 10 and 8 responses each which is equivalent to 62.5% and 50% of all the 16 respondents and 20.8% and 16.7% of all the 48 responses respectively. Structural Components and Conveniences had 6 responses each which is equivalent to 12.5% and 37.5% each of all the respondents and all the responses respectively. Room dimension and damping wall had 5 responses each which is equivalent to 31.2% of the respondents and it is 10.4% of all the responses.

The two tables and charts above show that design –related problems that are mostly complained by tenants are room dimension, finishing, structural components problems and not having the required number of conveniences in buildings. These are challenges landlord or his representative has to go through in maintenance.

Table 4: The involvement of an Estate Surveyor in property design

Estate Surveyors involvement in Property design		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	16	100.0	100.0	100.0

Source: Field survey, 2015

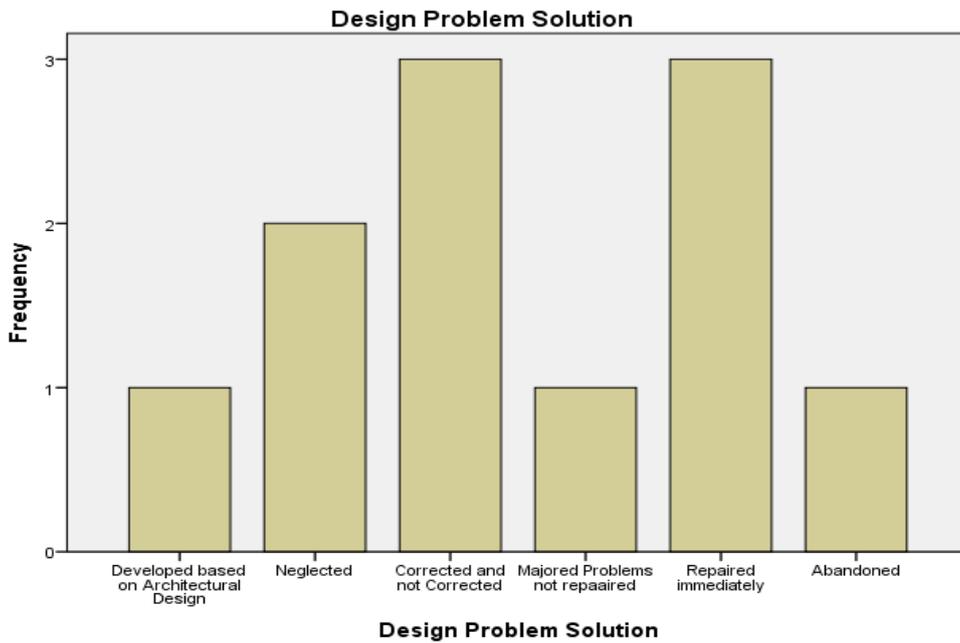


100% of Estate Surveyors reported that they are not involved in the design of the properties before the commencement of the construction. This shows that professional in the construction industry are not fully utilised to achieve a reasonable end result.

Table 5: Design Problem Solution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Developed based on Architectural design	1	6.3	9.1	9.1
	Neglected	2	12.5	18.2	27.3
	Corrected and not Corrected	3	18.8	27.3	54.5
	Majored problems not repaired	1	6.3	9.1	63.6
	Repaired immediately	3	18.8	27.3	90.9
	Abandoned	1	6.3	9.1	100.0
Missing	Total	11	68.8	100.0	
System		5	31.3		
Total		16	100.0		

Source: Field survey, 2015

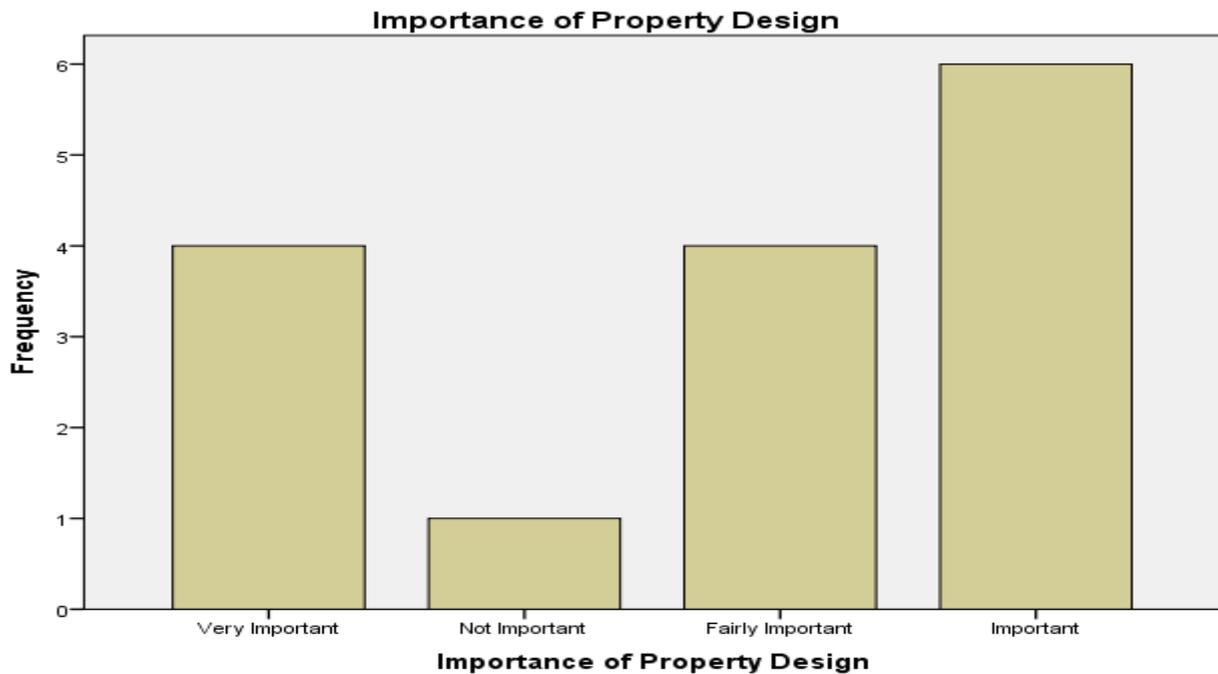


Only 11 of the respondents responded to this question. We have 5 missing variables. Most respondents, 3(27.3%), deal with design issues by correcting them if they are minor problems and not correcting them if they are major problems. 3(27.3%) also got the design problems repaired immediately. 18.2% of design problems are neglected while 9.1% is abandoned.

Table 6: Importance of a good architectural design to an Estate Surveyor

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	4	25.0	26.7
	Not Important	1	6.3	33.3
	Fairly Important	4	25.0	60.0
	Important	6	37.5	100.0
	Total	15	93.8	100.0
Missing System	1	6.3		
Total	16	100.0		

Source: Field survey, 2015



Of the 16 respondents, only 15 provided response to this question. From the respondents, 6, which is equivalent to 40% reported that good architectural design is important to them as practitioners. 4(26.7%) say it is very important. The same percentage of respondents say it is fairly important and 1(6.7%) says it is not important. From the above, it becomes easier for estate surveyors to maintain properties that are free from design problems because the owners continue to enjoy the returns on his investment for a longer period than those with design issues and tenants are likely to longer in such properties.

VI. Discussion of findings, Recommendation and Conclusion

Having carried out various analyses of data collected from the respondents in the study area, the findings from the analysis revealed that architect by his design and specification not only plays a significant role in influencing structures to be immediately located in the built environment. What he designs today and which stands serves and looks well today may become an issue to the society tomorrow because of lack of proper consideration of property maintenance. This is shown in table 3a and 3b. From table 3, 37.5% respondents selected room dimension as a major design fault followed by conveniences 12.5% and structural components. These problems appear to be the commonly problems mostly faced by occupiers of properties. This is because design-related problems are often difficult to correct once the building is erected.

Maintenance is very important that building owners and designers need to consider it at the conceptual stage of building design; it should not be a subject of thought after the erection of the building. Nevertheless, the design must not only be for the architect and structural engineers, it should also involve estate surveyors and valuers. In table 3b, it is revealed that space and finishing was the most frequently mentioned design problems by the respondents. If the dimension of room and surrounding spaces are not suitable for habitation, then this will bring down the value of the property and also giving out such property for rent might be difficult. Table 4 shows that 100% of the respondents are not involved in the design stage of properties and table 5 shows that some of the design related issues faced by estate surveyors and valuers are abandoned. This because getting these problems fixed after construction is likely a difficult thing to do. This is expected to happen since they do not suggest or give professional advice at the conceptual stage of building design.

Table 6 shows the importance of a good architectural design to an estate surveyor and valuer. Most of the challenges faced by estate surveyors at the management level would have been avoided if they are involved in the design stage of construction.

Based on these findings, it is obvious that the effect of architectural design to property maintenance is very challenging and problematic but the problems are not insurmountable.

Therefore in order to achieve good maintenance culture on properties and to achieve a good optimum return from the property, the following are recommended;

The design stage must not be for the architect and the structural engineers only but must also involve all other members of the building teams to enhance easily built ability and maintenance culture.

Choices made to favour maintenance should be such that it will be cost effective and easier to maintain. Physical structure may be stable, there is need to maintain an adequate level of repairs of the minor capital works in form of improvement, conversion or alteration.

The builder or the project manager should ensure a good standard of workmanship in the initial construction and subsequent maintenance.

In conclusion, finishing of building forms an integral part of the property value. Experts in the field of construction and property management ought to be part of the decision that will be taken as regards the maintenance culture in properties. The importance of building maintenance in the construction industry to the national economy cannot be undermined.

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