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Appraisal of Building Survey Practice in Nigeria

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Abstract: This is a report on investigation carried out in order to determine the way and manner building survey is practiced in Nigeria. An investigation on the curriculum of many tertiary institutions that run building programme, method of carrying out building survey in Nigeria, its use and whether or not there is an enabling environment that would ensure its proper use in the building industry. Besides that as a multidisciplinary subject, the perception and level of participation of all professionals in the building industry was assessed. The method used for carrying out the study was through the use of well structured questionnaires, oral interviews and the study of documents especially the syllabus of building programmes in universities and polytechnics and planning laws in some states of the federation and some of the building survey reports prepared. Results showed that students do not receive adequate training for the practice of building survey in most of the tertiary institution, there is also no standard format followed in carrying out building survey in Nigeria, also clients are not taking advantages that building survey offers as 63% of respondents have shown that building survey report is not used as part of collateral. Also, using a Likert scale of 1-4 on the reasons for carrying out building survey, the following results were obtained: use of building survey when a property is to be sold is 4.0, while the use of building survey when there is a problem with foundation is 3.84 and the use of building survey when there is fear of collapse of building is 3.65. Results also showed that building survey is beneficial to financial institutions and that the overall perception of building survey from all the groups of respondents has shown that most professionals are aware of building survey and the benefits derived from it and they view building survey as a basis for good maintenance work as well as one of the viable means of forestalling building collapse in Nigeria. However, it is not practiced as it ought to as such, it was recommended that government and professional bodies should regulate the practice of building survey in Nigeria.

Key words: Building survey, good practice, collapse of buildings, maintenance, safety of users

INTRODUCTION

The importance of the built environment to individuals and indeed, to any organization or even nation cannot be overemphasized because it provides the infrastructural base for all human activities. Adebayo (2008) noted that built space is among the two essential requirements, for achieving certain defined organizational objectives set by man. However, for any building to perform its function, it is necessary that they are maintained and kept at their optimal performance level at all times. One important factor needed for the accomplishment of such task is accurate, regular and systematic inspection of such building. Bokinni (2007) classified such inspection into two; these are: ongoing which is the type undertaken by the tenant or landlord on regular basis, as the user of such building, so as to detect any problem; the second type is the building survey which is within the province of the professional builder; for the fact that building is a complex product of his

professional practice and faults in buildings are in many cases, hidden and hence, difficult to find. That is why Awe (2008) noted that, it is logical to allow the producer (builder) to assess what has gone wrong with his product, for whatever reasons and prescribe possible remedial measures or solution to the diagnosed problems. The Nigerian Institute of Building (NIOB) classifies building survey as a specialized division of the building profession. Odetoyinbo (2006) defines building surveying as a comprehensive inspection and report of a property, providing a detailed picture of the condition and proposing remedial actions to restore or replace the building.

In Nigeria, presently, buildings deteriorate faster than they should due to lack of building surveying culture and maintenance (NIOB, 2006). Report by the Petroleum (Special) Trust Fund (PTF) shows that most public structures suffer from inadequate maintenance if not outright neglect (Usman, 2000). Unfortunately, the problem is not confined to maintenance problem for

according to the Leadership Newspaper (Anonymous, 2008), even some important measures such as inspection and survey of structures were not carried out as they ought to have which are necessary prerequisite to maintenance work. For instance, the structural defects on Lagos mainland bridge which has gulped (₹700,000,000) was not detected by authorities charged with the responsibility of maintaining the bridge but by the road users. The study further noted that the nation is vet to imbibe the maintenance culture. Also, Adebayo (2008) observed that the run down syndrome which is an attribute of public facilities in Nigeria, due to poor or lack of maintenance of public facilities has been the Achilles heel economic development of the country. of According to Ghalot and Sharma (2006) maintenance of building contribute significantly to the Gross National Product (GNP) of a country because efficiency can be related to human, equipment and services. If services and equipments are maintained to a high standard, this will mobilize high morale in the people using these equipment and services thus, completing the cycle of better efficiency and increased production which affect the GNP.

In addition, large amount of capital is used in the construction of buildings as such the only way that the value of such capital assets can be enhanced is by keeping them correctly maintained to prescribed standard. For if the building exhibits symptoms of distress and it is left unsurveyed, diagnosed and treated, its collapse not only results in loss of investment but often in loss of lives also.

However, with increase in technological complexity of the buildings, it leads to the need for something much more than maintenance. The growth of technology in business operation has focused attention of the building as resource which should be adaptable to the changing need of the business. Thus, properties increasingly demand more active management depending on its function.

This leads to asset management and recently Facility Management, all of which are geared towards maintaining the condition of the building, optimizing its running cost, making an effort to improve the efficiency of the organization through the improvement of the potential contribution of the building itself towards the work of the organization that is, managing the building in such a way that it support the core business of the organization.

All these will only be possible if there is continuous monitoring of building in order to detect any defect or problem associated with the building through building survey. This is particularly true in the case of Nigeria, where, according to Akinsola (2008), there is prevalence of various degrees of unsafe buildings located mostly in urban cities across the country. This, he noted leads to recurring rate of building collapses and ultimately death of innocent lives. Survey carried out by Iyagba between 1999-2003 shows that more than ever before the need for building surveying is higher now (Akinsola, 2006).

One major factor that is responsible for this serious problem faced in the Nigerian building industry is the lack of enforcement of and even, absence of national building code. While it is true that a new building code has been produced now, however most of the existing buildings were constructed with little or no regard to the provisions of the Building Code which in the opinion of Anderson (2005) leads to among others, risk, poor construction, billions in amount losses and 25-40% of those losses could be avoided through better code enforcement. A way out of the problem is by ensuring that the concept of building survey in Nigeria gains currency.

Concept of building survey: The NIOB (2002) Handbook described building surveying as, a specialized division of the building profession with expert knowledge of building inspection, identification of building defects, defects diagnosis, determination of causes and proposing appropriate remedies with a view to retaining all the design criteria and creating improvements to an existing building.

The survey, according to the Construction Industry Council (2003) will generally include the structure, fabric, finishes and grounds while exposure and testing of services are not usually covered. In addition, building survey will not normally include advice on the value. In the case of planning in existing built context, the buildings survey is the starting point for initial planning proposals, for the diagnosis and documentation of building damages for the creation of objectives, catalogues, for detailed design of renovation and conversion measures and for ensuring fulfillment of building legislation, particularly by change of use and refitting.

According to Petzold and Donath (2004), economically viable project realization necessitates the capture of a particular amount of relevant information. The principal means of obtaining such information is through an initial building survey which entails, organizing an interactive season with the client, consultants, contractors and their agents and if possible, the artisans, carpenters, mason and steel benders etc., this is aimed at getting raw data that will shed more light on the condition of the building. Information would be sourced from desk study of designs, proposed and as-built, specifications, bill of qualities, site reports and diary: Weekly report, site progress report and minutes. It also includes an initial site visit (i.e., room and building element oriented, recording

of building and access routes). Besides that research into historic documentation and basic geodetic, geotechnical and other basic information regarding the immediate relevant surroundings. Integrity checks should be carried out so as to determine the soundness and the degree of compliance of the design with relevant codes, standards and regulation.

It also involve checking of the soundness of various provisions in the design with relevant codes and standard, through selecting critical structure elements such as beam, column foundation, analyzing and designing them so as to check the adequacy of the section and the steel reinforcement.

Thus building survey is in nutshell, examination of a property in whole to determine the current soundness and functionality of the building. The primary purpose of building survey is to give an independent professional opinion on the condition of the property that is why those who are best qualified to carry out such study, must have sound knowledge and considerable experience in the performance of the buildings and their components as well as their design, construction, defect finding, remedying and giving approximate costs.

According to Bokinni (2007) building surveyor should be well informed on how a particular building and the elements of which it is composed will perform in a given environment. He should be conscious of traditional materials and traditional construction methods for that particular locality.

The extent of the survey will be subject to specific agreement between professionals and the client. It is suitable for all properties, it examines all accessible parts of the property and the client can ask to have specific area included so it covers any particular concern the clients have about the building.

MATERIALS AND METHODS

Field survey: The field survey was mainly concerned with the way and manner building survey is practiced in Nigerian building industry. The survey was confined to the key participants in building industry in Nigeria and financial institution in Nigeria.

The samples were collected randomly from building construction organization, consultants of the client in the building industry, banks and other financial institution, professionals. The places in which this research was carried out covered the Federal Capital Territory Abuja, Kaduna, Kano, Plateau, Sokoto and Kebbi states. Three major tools were used in the survey. These are:

Preparation of questionnaire: A well-structured questionnaire were prepared and administered to the respondent.

Oral interviews: Interview of some professionals was conducted. This was specially targeted to lecturers in the higher institutions that teach building so as to discuss the quality of training on building survey; planning authorities were also consulted to determine the existence of legislation, extent of application and enforcement of legislation on building survey. Those that were involved in the survey were also interviewed.

Study of documents: The curriculum of universities and polytechnics, sample of building survey report, local planning laws and document relating to the conditions for the award of loans to customers by the banks were studied.

Description of data and collection instrument: Structured questionnaires containing closed ended questions with suggested answers measured on a Likert scale were developed and administered to two distinct groups of respondents. Respondents to questionnaire Type A financial institutions while professionals in the building industry responded to questionnaire Type B.

Likert scale is concerned with determining the respondents' degree of agreement or disagreement with a statement; it enables the ranking of the attitudes of the respondents on the statement (Osuala, 1987; Fellows and Liu, 1997). Four point scales of the Likerts were adopted in this research. Most of the data for this research fall under the ordinal scale since they involve rating which normally uses integers in ascending or descending order for instance, the respondents' professions. Others fall under the nominal scale which tends to classify the data having a particular property but does not imply any idea of rank or priority. For example, on four points scale (i.e., 1-4), respondents were asked to indicate their level of importance attached to the reasons for building survey and benefits of building survey.

The scales were labelled as follows; 1 = not important, 2 = less important. 3 = important, 4 = very important. And also as 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree were used for determining the level of agreement with the benefits derived from building survey.

RESULTS AND DISCUSSION

Results of the study on building survey are analysed as follows:

Work experience: The response among financial institutions shows that majority of the respondents have work experience 10-15 years (36.8%) followed by those with work experience 15 years above (31.6%). Also the professionals in the construction industry had work experience between 5-10 years (35.5%) followed by those with work experience 15 years above and 10-15 years whose percentages were 25.8%, respectively.

Qualifications: The qualification of these professionals shows that 41.9% possesses Bachelor of Science Degree (B.Sc) and 29% possess Master of Science Degree (M.Sc) as against Ordinary National Diploma (0%), 19.4% Higher National Diploma (HND) and 9.7% Doctorate Degree (PhD). Thus, most of the respondents are intellectually capable of understanding and answering questionnaire.

Guidelines for accepting building as collateral: In order determine whether building survey was used as guidelines for accepting building as collateral 3 categories of guidelines were presented to respondent to choose the one they use.

Category A: Comprises of presentation of a document certified by a builder or an engineer confirming the integrity of the building. Presentation of a cost valuation document certified by a Quantity Surveyor.

Category B: Comprises of presentation of a cost valuation document certified by a Quantity Surveyor. Visual inspection and knowledge on the area in which the building is located.

Category C: Comprises of presentation of a document certified by a builder or an engineer confirming the integrity of the building Presentation of a cost valuation document certified by a Quantity Surveyor. Visual inspection and knowledge on the area in which the building is located Majority of the respondents adopted the guidelines in category B (63%) as against 21% to category C and 16% to category A.

Reasons for building survey: Building Survey has several reasons that are attributed to its practice. Akinsola (2008) outlined the reasons for building survey, some of the reasons identified in the literature were presented to all groups of respondents and results shown in Table 1-3. Some of these reasons for building survey presented on a four point scale, the respondents were asked to rate the level of importance attached to these reasons.

Table 1-3 displays the frequencies and mean value for all the groups of respondents, the most important reason to the first group of respondents (financial institutions) are; to determine the value of sale when a property is to be sold (4.00) and when a heavy construction undermines the foundation of a near building (3.89) while the most important reasons to the second group of respondents (professionals in the construction industry) are; fear of collapse (3.65) and when a property is to be leased for a long period. The response from financial institutions shows that all the reasons for building survey were important except for fire hazards and bomb explosion near a property while response from professionals in the construction industry showed that all the reasons for building survey were all important.

Benefits derived from building survey: The importance of building survey to clients in the construction industry cannot be over emphasized. Several benefits derived from building survey as outlined by Odetoyinbo (2006) in the literature were presented to all groups of respondents and the results presented to all groups of respondents and the results shown in Table 4.

Table 4 shows the frequencies and mean value for all the groups of respondents. The most beneficial to the first group of respondents (financial institution) are; It is used

Table 1:Fequency distribution table for identified reasons of building survey (questionnaire type A)

	Frequency of responses						
Reasons	1	2	3	4	$\Sigma { m fi}$	$\Sigma f x$	Mean (x')
As a basis for insurance payment	-	-	7	12	19	69	3.63
To determine the value of sale when property is to be sold	-	-	-	19	19	76	4.00
When a property is to be leased for a long period	-	-	4	15	19	72	3.79
Property conversion	-	-	3	16	19	73	3.84
Fire hazards	-	15	4	-	19	42	2.21
Fears of collapse	-	7	5	7	19	57	3.00
Occurrence of earth tremor or earthquakes	-	10	7	2	19	49	2.58
Bomb explosion near the property	-	19	-	-	19	38	2.00
When a heavy construction undermines the foundation of a near building	-	-	2	17	19	74	3.89

Field survey (2008)

Table 2: Frequency distribution table for benefits derived from building survey (Questionnaire type A: banks)

	Frequency of responses							
Benefits	1	2	3	4	Σfi	$\Sigma f x$	Mean (x')	
It creates awareness on the state of the property	-	-	16	3	19	60	3.16	
and determines its value								
It helps to retain construction criteria while	-	-	12	7	19	64	3.37	
creating improvement to an existing building								
It is used by financial institutions to determine	-	-	-	19	19	76	4.00.	
the value of the property which is to be used								
as collateral								
It assists insurance companies to know the	-	-	8	11	19	68	3.58	
status of a building in order to determine premium,								
on it when insuring against forced major								
It assists in conservation of existing	-	-	6	3	9	30	3.33	
buildings to retain its structural stability								
and functionalities								
It assists in conservation of existing	-	-	0	16	19	73	3.84	
buildings to retain its structural								
stability and functionalities								

Field survey (2008)

Table 3: Response to policy on building survey (documenting results to determine the organization with policy on building survey)

	Enganization with policy on can	
Responses	Frequency	Percentage
Yes	4	21.05
No	15	78.95
Total	19	100.00

Field survey (2008)

by financial institutions to determine the value of the property which is to be used as collateral (4.00) and it assists in conservation of existing buildings to retain it's structural stability and functionalities (3.84) while the most beneficial to the second group of respondent (professionals in the construction industry) are; it creates awareness on the state of the property and determines its value (3.90) and it is used by financial institutions to determine the value of the property which is to be used as collateral (3.71).

However, based on the data's collected it was observed that the benefits of building survey as outlined by Odetoyinbo (2006) were beneficial to the two groups of respondents.

Format of preparation of a building survey report: The format of preparation of a building survey report is a framework to serve as a guide and reminder on what is required to be discussed and included in the building surveying report. The formats as outlined by Akinsola (2008) in the literature were presented to the respondents (professionals) to select from a list the various parts of a building survey report.

Table 5 shows the frequency of response and percentage response. The response shows most respondent adopted the following as part of the format of preparation of a building survey report. Introduction (58.06%), site surveys (61.29%), preparation of schedule

Table 4: Frequency distribution of factors responsible for an organization without policy on building survey

Factors	Frequency
Weakness in government policy/legislation	4
Cost of carrying out Building Survey	3
Lack of awareness	9
Negligence	3

Field survey (2008)

Table 5: Response to format of preparation of a building survey report

	Frequency		
Format	of responses	Total	Response (%)
Introduction	18	31	58.06
Object of study.	10	31	32.26
Interview report	7	31	22.58
Preliminary	13	31	41.94
Site surveys/reconnaissance/	19	31	61.29
Environmental repor			
Preparation of schedule	23	31	74.19
of defects/dilapidations			
Recommendation of remedial	21	31	67.74
/works necessary			
Cost summary of remedial	26	31	83.87
works			
Conclusion	23	31	74.19
Stamp and seal	13	31	41.94

Field survey (2008)

of defects/dilapidation (74.19%), recommendation of remedial works necessary (67.74%), cost summary of remedial works (83.87%), conclusion (74.19%) and few of the respondents adopted the following object of study (32.26%), interview report (22.58%), preliminary and stamp and seal (41.94%), respectively. However, based on the data's collected, no respondent fully followed the formats used in the presentation of a report on building survey as Outlined in the literature by Akinsola (2008).

Enabling environment for the practice of building survey: As regards to the policy on building survey, the respondents (financial institutions) were asked whether they had any policy on building survey and it

Table 6: Level of participation of professionals in any team carrying out building survey

Response	Number of responses	Percentage of responses
Yes	13	41.94
No	18	58.06
Total	31	100.00

Field survey (2008)

was observed based on the data's collected that majority of the respondents (78.95%) do not recognize building survey as an important requirement regarding the acceptance of building as a collateral and this was largely due to lack of awareness on the practice of building survey in Nigeria.

Extent of participation of professionals in building survey: Table 6 shows the level of participation by professionals in the practice of building survey, from the data's collected 41.94% of 31 respondents participated in building survey while 58.06% of the 31 respondents do not participate in building survey. However, based on the data's collected, the practice of building survey is still very low compared to the level of awareness among professionals.

RESULTS AND DISCUSSION

From personal interaction with lecturers/professionals in an attempt to ascertain the practice of building survey in Nigeria, the investigation shows that the current syllabus of building survey taught in the universities is inadequate to enable one practice building survey. Also, it was observed from this investigation that Building Survey is partially practiced in Nigeria and that government and professional bodies were responsible for enforcing the practice of building survey but since there is no legislation that makes it mandatory to carry out building survey on buildings that are supposed to be survey, this could be responsible for lack of serious attention paid to building survey in Nigeria. Although, the new building code in Nigeria has taken care of that but result of the interview shows that failure of those responsible to regulate its practice added to the fact that it is not practiced as a group.

Results of interview and inspection of some few building survey reports shows that there important steps that are not taken. For instance in all the reports, there was no anywhere that some major structural elements like beams columns, foundation that were subjected to rigorous analysis, design and checking so as to determine their structural integrity. The investigation also shows that lack of building survey is responsible for unplanned maintenance work, bad maintenance culture and confusion with respect to occupancy changes especially in office buildings which will be responsible for damages.

CONCLUSION

Based on the results obtained in this research, the following conclusions were drawn:

- Building survey is partially practiced in Nigeria and this leads to unplanned maintenance work, bad maintenance culture and confusion with respect to occupancy changes
- There is no standard format followed in carrying out building survey in Nigeria and professionals are not working as a team as they ought to when carrying out building survey
- There is no enabling environment as regards to the practice of building survey, in form of legislation requiring owners of buildings to periodically undertake building survey, especially for multistorey buildings or the use of building survey for buying or selling of buildings or when the building is to be used as collateral
- Full advantage that building survey offers to owners of building is not used

RECOMMENDATIONS

Based on the results obtained in this research, the following were recommended:

- Building survey is vital for most business transaction involving buildings either for buying, selling or when it is to be used as collateral as such financial institutions, professionals in the construction industry especially Builders should use this opportunity by introducing their services to the financial sector
- Those corporate and individual clients who intend to acquire properties must be enlightened to commission building survey to determine the worthiness of such properties
- The practice of building survey should be made compulsory for certain types of buildings (like storey buildings) by government requesting for building survey report of buildings in existence for over 10 years and above
- That before any conversion, alterations, addition or improvement is allowed by the government, request for building survey report should be a condition

- The clients, especially the government and the private sector are advised to make use of builders to improve the lives of their properties
- Government and professional bodies should regulate the practice of building survey in Nigeria and prepare a comprehensive guideline for its practice

APPENDIX A Questionnaire Type A

Department of Building, Faculty of Environmental Design, Ahmadu Bello University, Zaria, Nigeria

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Section B: Building Survey

- 1. Do you have understanding of all different types of defects in a building and what these defect could mean to the building?
 - (a) Yes (b) No
- 2. Do you have details of the possible cost of repairs of these defects?
 - (a) Yes (b) No

- 3. Do you carryout structural investigation on buildings?
 - (a) Yes (b) No
- 4. Do you have technical information on the construction of the property and the material used?

 (a) Yes (b) No
- 5. Do you accept buildings as collateral?
 - (a) Yes (b) No
- 6. If yes, what are your guidelines for accepting building as collateral? Please tick as appropriate.
 - () Presentation of a document certified by a Builde or an Engineer confirming the integrity of the building
 - () Presentation of a cost valuation document certified by a Quantity Surveyor
 - () Visual inspection and knowledge on the area in which the building is located

() Otners, pleas	e specify	

- Do you have a team of professionals responsible for carrying out Building Survey in your organization?
 (a) Yes (b) No
- 8. If yes, who are the professionals in your team? (Please tick)
 - () Architects
 - () Builders
 - () Engineers
 - () Quantity Surveyors
 - () Others, please specify_____
- 9. How many people are in your team of professionals carrying out Building Survey?
 - (a) 0-3 (b) 3-6 (c) 6 and above
- Tick the number of a particular professional in your Building Surveying team

Professional	1	2	3	4 and above
Architects				
Builders				
Engineers				
Quantity Survey ors				

- 11. Have you attempted to implement Building Survey before organization?
 - (a) Yes (b) No
- 12. If No, state reasons (please tick)

() Cost of	carrying out, Building Survey
() Lack of	f awareness
() Neglige	ence
() Others	s (please specify)

- 13. Do you record the amount of Building Survey conducted on your buildings?(a) Yes (b) No
- 14. How many Building Survey conducted do you record yearly?
 - (a) 0-10 (b) 11-20 (c) 21-30 (d) 31 above
- 15. Below are some reasons for Building Survey. Please indicate the level of importance attached to the reasons by your organization, on scale (1-4) by ticking the appropriate option.

Not Important – 1 Less Important – 2 Important – 3 Very Important - 4

S/No.		1	2	3	4
1.	As a basis for insurance premium payment				
2.	To determine the value of sale when property is to be sold				
3.	When a property is to be leased for a long period				
4.	Property conversion				
5.	Fire hazards				
6.	Fear of collapse				
7.	Occurrence of earth tremor or earthquakes				
8.	Bomb explosion near the property				
9.	When a heavy construction undermines the foundation of a near building				

16. The factors below are identified as prompting Building Survey; please indicate your level of agreement with these factors on scale (1-5) by ticking the appropriate option.

Neutral – 1 Strongly disagree - 2 Disagree – 3 Agree – 4

Strongly agree – 5

S/No.	Factors	1	2	3	4	5
1.	Trace of dampnaess on walls					
2.	Water ingress from the substructyre into the rooms					
3.	Sagging of the roof					
4.	Noticeable cracks on walls					
5.	Leaking concrete roof					
6.	Noticeable cracks on walls					
7.	Noticeable creaks of colum and beams					
8.	Partial settlement of structure					
9.	Foundation failure					
10.	Paint failure					

- 17. What benefits are derived from Building Survey (select all that apply)
 - ()It creates awareness on the state of the property and determines its value
 - () It helps to retain construction criteria while creating improvement to an existing building
 - () It is used by financial institutions to determine the value of the property which is to be used as collateral for loan
 - () It assists insurance companies to know the status of a building in order to determine premium, on it when insuring against forced majore
 - () It assists in conservation of existing buildings to retain its structural stability and functionalities
 - () It assists in the identification of building defects, causes and proffer appropriate remedies
- 18. Please indicate the level of importance you attached to the following benefits of Building Survey on scale (1-4) by ticking the appropriate option

Not important – 1 Less Important – 2 Important – 3 Very Important – 4

S/No.	Benefits	1	2	3	4
1.	Cost valuation				
2.	Structural integrity				
3.	Identification of building defects, causes and appropriate remedies				

Section C: Organisation policy

arrying out of Building Survey in Nigeria? a) Yes (b) No Tyes, in 1. Above, how do you rate the level of therence to the policy? a) Very poor (b) Poor (c) Moderate (d) High for high Two, in 1. Above, what factor do you think might e responsible? b) Weakness in government policy/legislation cost of carrying out Building Survey controlled by Lack of awareness controlled by Noeling Survey in Nigeria? The you aware of any legislation governing arrying out of Building Survey in Nigeria? The Yes (b) No
Yes, in 1. Above, how do you rate the level dherence to the policy? A) Very poor (b) Poor (c) Moderate (d) High ery high No, in 1. Above, what factor do you think might eresponsible? (a) Weakness in government policy/legislation (b) Cost of carrying out Building Survey (c) Lack of awareness (c) Negligence (c) Others (please specify) Are you aware of any legislation governing arrying out of Building Survey in Nigeria?
cherence to the policy? (a) Very poor (b) Poor (c) Moderate (d) High (ery high) (b) No, in 1. Above, what factor do you think might responsible? (c) Weakness in government policy/ legislation (c) Cost of carrying out Building Survey (c) Lack of awareness (c) Negligence (c) Others (please specify) (c) Tree you aware of any legislation governing arrying out of Building Survey in Nigeria?
n) Very poor (b) Poor (c) Moderate (d) High Yery high Yery high Yoo, in 1. Above, what factor do you think might responsible? 1) Weakness in government policy/legislation 1) Cost of carrying out Building Survey 1) Lack of awareness 1) Negligence 1) Others (please specify) The you aware of any legislation governing arrying out of Building Survey in Nigeria?
No, in 1. Above, what factor do you think mige responsible? Weakness in government policy/legislation Cost of carrying out Building Survey Lack of awareness Negligence Others (please specify) The you aware of any legislation governing arrying out of Building Survey in Nigeria?
) Weakness in government policy/ legislation) Cost of carrying out Building Survey) Lack of awareness) Negligence) Others (please specify) re you aware of any legislation governing arrying out of Building Survey in Nigeria?
) Lack of awareness) Negligence) Others (please specify) are you aware of any legislation governing arrying out of Building Survey in Nigeria?
) Negligence) Others (please specify)
Others (please specify) re you aware of any legislation governing arrying out of Building Survey in Nigeria?
re you aware of any legislation governing arrying out of Building Survey in Nigeria?
arrying out of Building Survey in Nigeria?
re you in a position to formulate policies for you
a) Yes (b) No
yes have you attempted to formulate a policy uilding Survey?
n) Yes (b) No
yes, what was the outcon

Introduction:

This questionnaire is being administered for an undergraduate research at the Department of Building, Ahmadu Bello University, Zaria. It is designed to get relevant information on the Application of Building Survey in Nigeria. Any information given would be used strictly for academic purposes and respondents are guaranteed maximum confidentiality.

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Section A: Personal data

1.	Name of respondent (optional)
2.	Years of experienc. (a) 0-5 years (b) 5-10 years (c) 10-15 years (d) 15 years above
3.	Profession (pease tick) () Architecture
	() Building
	() Engineering
	() Quantity surveying() Others, please specify
	() Outers, prease specify
4.	Job title/Designation?
5.	Please tick your highest qualification obtained.
	() Ordinary National Diploma
	() Higher National Diploma
	() Bachelors Degree
	() Post-Graduate Diploma
	() Masters
	() Doctorate Degree
	() Other (please state)
Sect	tion B: Building Survey
6.	As outlined in the Nigerian Institute of Building (NIOB) handbook, Building Survey is one of the distinct functions of a professional builder; do you think it is practiced in Nigeria?
7.	(a) Yes (b) No If No, do you think that the inability of a professional builder to carryout Building Survey will have effect on the Building industry and Nigeria?
8.	Do you carryout structural investigation on buildings? (a) Yes (b) No
9.	In what way do you think the practice of Building Survey can assist the Building Industry and Nigeria?
10.	Whom are you working for?
10.	Whom are you working for? (a) Government
10.	(a) Government
10.	•

J. Eng. Applied Sci., 5 (3): 181-192, 2010

	(e) Education	nal In	stitutio	n		()) Preliminary				
	(f) Others	(speci	fy)			() Site Surveys/Recon	naissa	nce/Ei	nviro	nmental
						Re	eport				
11.	What is Bu	ıildinş	g Surv	ey in	your own view?	(· •	Schedu	ıle <i>i</i>	of :	Defects/
							ilapidations				
							Recommendation of R			ks ne	cessary
10			. 1 .	<u> </u>			Cost summary of Reme	dial w	orks		
12.				n any	team carrying out	, ,) Conclusion				
	building surv		Υ) Stamp and seal			·	1 11-
1.2	(a) Yes (b)		1	c:_	-1- : 40		hat format do you adop		resent	ing s	scheaule
13.	(please tick)	are i	ne pro	tession	als in your team?		dilapidations? (please ti) Use of forms	CK).			
	() Architect	~						o artai		.aa +1	a ranart
	() Builders	.5) Guidelines containing ould reflect	Certai	11 188U	.cs u.	ie report
	() Engineers) Unwritten guidelines				
	() Quantity		vore) No well defined format	-			
	() Others, p		-	,			elow are some reasons for		ing S	urves	v Please
	() calcis, i	Jied. C	speem	·			dicate the level of imp		_	-	
14.	How many p	eople	are in v	our tea	m of professionals		asons, on scale (1-4) by				
	carrying out	_	_		F		otion.				
	(a) 0-3 (b)		_	-	oove	1					
15.					rofessional in your	Not Imp	portant – 1				
	Building Sur		_	•	•	-	portant – 2				
	_	-				Importa	ant – 3				
Prof	essional	1	2	3	4 and Above	Very In	nportant - 4				
		+									
Arc	hitects	+				S/No.	Reasons	1	2	3	4
Buil	ders					1.	As a basis for insurance				
Eng	ineers					1.	premium payment				
_						2.	To determine the value of	1			
Qua	ntity Surveyors					۷.	sale when property is to be				
							sold				
16.			s where	you c	arried out building	3.	When a property is to be				
	survey alone						leased for a long period				
	(a) Yes (b)				1.0	4.	Property conversion				
17.	If yes, how f	_	nt have	you do	ne it?	_		+	+-	+	
	() Every tim					5.	Fire hazards			₩	
	() Sometime () Never	es				6.	Fear of collapse				
18.	` '	ord f	he amo	unt of	Building Survey	7.	Occurrence of earth tremor				
10.	carried out by				-		or earthquakes				
	(a) Yes (b)		aria y o	ar courr	.•	8.	Bomb explosion near the				
19.			ng Surv	ev are	carried out by you	0.	property				
	and your tear			-,				+	+	+	
	(a) 0-10 (b)	-	-	21-30 (d) 31 above	9.	When a heavy construction undermines the foundation				
20.					lo you use in the		of a near building				
					ng Survey? (Select		<u>'</u>		•		
	all that apply		•			23. Th	ne factors below are	identif	ied a	s pr	ompting
	() Preamble		oductio	n			iilding Survey; please			_	

agreement with these factors on scale (1-5) by

ticking the appropriate option.

() Object of study/aim and objective

() Interview report

Neutral – 1 Strongly disagree - 2 Disagree – 3 Agree – 4 Strongly agree – 5

S/No.	Factors	1	2	3	4	5
1.	Trace of dampness on walls					
2.	Water ingress from the substructure into the rooms					
3.	Sagging of the roofs					
4.	Leaking roof covering					
5.	Leaking concrete roof.					
6.	Noticeable cracks on walls					
7.	Noticeable cracks on column and beams					
8.	Partial settlement of structure					
9.	Foundation failure					
10.	Paint failure					

- 24. What benefits are derived from Building Survey (select all that apply)
 - () It creates awareness on the state of the property and determines its value
 - () It helps to retain construction criteria while creating improvement to an existing building
 - () It is used by financial institutions to determine the value of the property which is to be used as collateral for loan
 - () It assists insurance companies to know the status of a building in order to determine premium, on it when insuring against forced major
 - () It assists in conservation of existing buildings to retain its structural stability and functionalities
 - () It assists in the identification of building defects, causes and proffer appropriate remedies
- 25. Please indicate the level of importance you attached to the following benefits of Building Survey on scale (1-4) by ticking the appropriate option

Not important – 1
Less Important – 2
Important – 3
Very Important – 4

S/No	Benefits	1	2	3	4
1.	Cost valuation				
2.	Structural integrity				
3.	Identification of building defects, causes and appropriate remedies				

	es (b)				
If y	zes, pl	ease	state _		
	1.1				
		-	recomme Building		

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