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ESTIMATING THE REINSTATEMENT OR REPLACEMENT COST IN VALUATION: A CASE FOR THE ESTATE SURVEYOR AND QUANTITY SURVEYOR TO WORK IN TANDEM IN PERFECTING VALUATION BRIEFS WHEN USING THE CONTRACTOR'S METHOD (DEPRECIATED REPLACEMENT COST METHOD) IN DETERMINING THE VALUE OF PROPERTIES

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ABSTRACT: *This paper seeks to highlight the need for Estate Surveyors and Valuers in Nigeria to improve on their current cost estimation techniques when valuing non-rent yielding and specialized properties using the DRC method of valuation and most importantly engage the services of Quantity Surveyors in ensuring that accurate cost estimates are provided for use in the valuation process. The research methodology adopted in actualizing the aim of this work made use of primary and secondary sources of data which included questionnaires and oral interviews. The measurement analysis of data made use of statistical tables and simple percentages. The postulated hypotheses on the other hand was tested and analyzed using the chi-square Statistic technique with a significance level of 5% (0.05). The findings showed that indeed there was a dearth of information on the part of Estate Surveyors and Valuers when it came to the knowledge and use of current cost estimating methods when valuing properties using the DRC method of valuation. These findings also highlighted the fact that the services of Quantity Surveyors most times are not commissioned when these cost estimates are to be determined for valuation, hence leading most times to properties being undervalued or overvalued. In a nutshell, the recommendations postulated dwelt on improving the cost estimating knowledge of Estate Surveyors and Valuers through seminars, symposiums and workshops organized by NIESV and NIQS, awareness of the need for Valuers to work with Quantity Surveyors to perfect valuation briefs involving the use of the DRC method and changes made to the curriculum of the study of the course Estate Management in tertiary institutions.*

KEYWORDS: Depreciated Replacement Cost, Estate Surveyors, Quantity Surveyors, Valuation, Properties.

INTRODUCTION

It has long since been established by law through Decree No. 24 of 1975 that Estate Surveyors and Valuers are the only recognized professionals permitted to carry out the valuation of properties in Nigeria(Estate Surveyors and Valuers [Registration, etc] Act, 2007). These properties range from owner-occupied, to income producing properties and non-income producing properties. Most often than not, these owner occupied properties because of their style and design do not have recent sales of comparables in the property market and as a result, it is difficult to determine the value of the property without taking into consideration the cost of the building less any necessary allowances for depreciation and obsolescence. Even some income producing properties do not have the true market rent passing through them and as a

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result, the use of the investment method of valuation cannot suffice to determine the true value of the property, hence the use of the replacement cost and depreciation approach. The same rationale is employed in non-income generating properties such as public schools, churches, hospitals which are not subject to market potentials and whose value would be impracticable to obtain in relation to comparables. The contractors method of valuation helps to solve this dilemma by taking into account the unit cost (replacement cost) of the property before depreciating and adding the value of the land. The unit cost in practice by most Estate Surveyors and Valuers is either done by calculated guesswork or face value. Most times the unit cost is gotten from 'experience' having carried out similar valuations on comparable properties. This at the end of the day leads to the property being over valued or in most cases undervalued. The aim of this paper therefore is to investigate how often professional Quantity Surveyors are commissioned by Estate Surveyors and valuers when carrying out valuation briefs involving the use of the DRC method and also measure the effectiveness of valuation reports produced with the input of a Quantity Surveyor when it involves the use of the DRC method.

What is Depreciated Replacement Cost Method of Valuation (DRC)?

Millington (2000) defined valuation as the art or science through which the estimated value of a particular interest in property can be determined at a specific time taking into consideration all the features of the property and also considering the underlying economic factors of the market including the range of alternative investments. The process of computing or arriving at the worth of a property is a function of the Valuer's wealth of experience and availability of relevant market data and specific property analysis, like topographic and other site formation; construction analysis, etc. Valuation is therefore regarded as being both a science and art because it requires a certain measure of flair and judgment that is partly derived from experience in analyzing market data to arrive at an opinion of value.

For the professional Estate Surveyor and Valuer to effectively carry out his statutory functions of valuing properties, Ifediora (2009) identified three basic methods of valuation namely

- Investment or income method
- Market data method and
- Replacement cost method

He further explained that the replacement cost method was used to determine property value by reference to cost of reproduction or equivalent re-instatement cost of the property. In the cost approach, the value of land is first determined, the depreciated reproduction cost of the building and infrastructural improvements is then added to it in order to arrive at a value.

Kuye (2011) posited that the rationale behind adopting this method of valuation is that when deciding what to pay for a property, the prudent, intending buyer would realize that he has the alternative of purchasing a site in a comparable location and erecting a property that is comparable to the subject property. Therefore, the cost of land and construction plus an entrepreneurial profit will be the upper limit of the value of the property being valued. When the subject property is not new and suffering from some obsolescence, it is argued that the prudent buyer will insist on paying less than the cost of a new building without depreciation.

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The DRC method is best used when improvements are new and there is adequate pricing information to value the property components. This approach may be less desirable if there are no recent sales of vacant land for which to compare, since the major method of valuing vacant lands is to use the sales comparison approach, or when constructions are not readily available.

Chika (2009) highlighted that for the purpose of determining open market value, the contractor's method is applicable to any property for which there is inadequate or no market data which will permit valuation by either the market comparison or the income –capitalization methods. Special properties such as town halls, public schools and barracks designed and built for specified uses outside the general commercial uses are notable in this category. For such properties, comparables are not readily available. Therefore, the price that anyone might be reasonably willing to pay for such a property in this class is the amount it would cost him to erect a similar one elsewhere.

In applying the contractor's method (to obtain market value), the Valuer will:

i. Decide if the objective of valuation is to determine the reproduction cost of an identical building with all is defects and advantages or the value of a comparable building capable of producing similar level of utility-replacement cost.

ii. Determine whether production or replacement is appropriate.

iii. Determine the production or replacement cost of the structure being valued.

iv. Find the cost of any site improvements.

v. Estimate the appropriate monetary amount of depreciation discount necessary to adjust the construction cost (new) for any depreciation observed in the property being valued.

vi. Deduct the depreciation allowances from the cost new of the structure and the site improvements.

vii. Add the market value of the land to the depreciation cost of the improvement and site improvement.

viii. Add an allowance for developers profit to the last figure obtained above if this item has not been built into the cost.

Determining the Replacement Cost of a Building

The general principle when using the contractor's method of valuation is that the value should price a gross replacement cost of a modern substitute building with the same service capacity of the building which is being valued, but assuming modern design, materials, technology and current regulations. Such a building should be assumed to have the design and be constructed of materials appropriate with the activity undertaken in and the service offered by the original building. The determination of the replacement cost poses some difficulties. Basic to arriving at the cost of replacement is first an estimate of the reproduction cost new as at the date of appraisal. Here we run into some problem. What do we mean by reproduction or replacement cost (new) of an existing building?

Ifediora (2009) defined reproduction cost as the cost of duplicating a building or improvement, using the same cost of construction and similar typesof building materials. Likewise, American

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Society of Appraisers(2010) stated that the current cost of constructing a similar property equal to the existing structure being valued in quality and utility taking into consideration current prices, standards of materials and designs can be defined as replacement cost.

Reproduction involves the total reproduction of a thing in its current state and may be difficult to estimate because identical materials may not be available or construction methods may have changed. In such a situation the use of replacement cost provides a practical alternative. It represents the required funds to erect an equally desirable substitute property not necessarily constructed with the same materials or to the same specification. Reproduction envisages faithful copy while replacement focuses onequivalent substitute, hence replacement cost is usually lower than reproduction cost. Replacement costs are those costs which would actually be incurred in replacing the property or its substitute. It is therefore equivalent reinstatement at the current prices and not historic cost of construction.

Whether we are dealing with replacement or reproduction costs, direct building costs and indirect building costs are usually considered. Direct building costs include costs of materials and labour generally including the contractor or sub-contractors overhead and profit while indirect costs include professional services, developer's overhead, including cost of finance and bridging loan borne by developer until the construction is completed and the property occupied.

The indirect cost has to be considered even though the building is already in existence, because these costs would have been borne and at today's rates if the building were to be built now. For a just completed building with accurate records, the cost of development constitutes the replacement or reproductive costs, therefore, for an existing property, the historic cost of production, as we noted earlier is no longer valid.

The Quantity Surveyor

Quantity surveyors are called by so many names all over the world such as cost engineers, building economists, cost managers, construction accountants, etc and different authors have adopted these different names in different studies (Seeley and Winfield, 1999; Kelly and Male, 2006) and in Nigeria such as (Ajanlekoko, 2004; Ogunsemi, 2004). It is to be noted that the most common name for this professional in Nigeria is "quantity surveyors". Quantity surveyor according to Wikipedia (2015) is "a professional trained, qualified, and experienced in handling construction cost, construction management and construction communication on behalf of the client".

Methods of Estimating Costs

Professionally the work of estimating cost of construction belongs to the Quantity Surveyors or Cost Accountants as they are sometimes called. For the valuation by cost approach of a major development, the Valuer should obtain the cost estimate from the consultant quantity surveyor. For most valuations, however, the Valuer produces his cost estimate using less complicated forms of costing.

According to Breedt (2010) and Simon-Eigbe (2003), the methods of cost estimating include;

i. Cost-per unit method of estimating
ii. Square-metre method of estimating

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iii. Rough or inclusive-quantities method of estimating
iv. Storey-enclosure method of estimating
v. Cube method of estimating
vi. Elemental method of estimating
vii. Comparative estimating
viii. Interpolation estimating

Cost –per-unit method of estimating

In the cost-per-unit method, the estimate of total building cost can be obtained by multiplying the use-factor of a project by an "all inclusive" monetary rate based on historical records. Examples of use factors include the number of keys/rooms in a hotel, the number of beds in a hospital, the number of people to be accommodated in a restaurant, etc. The technique is based on the fact that there is usually some close relationship between the cost of a construction project and the number of functional units it accommodates. Functional units are those factors which express the intended use of the building better than any other. This method is extremely useful on occasions where the Valuer requires a preliminary estimate based on little more information than the basic units of accommodation. Cost-per unit method applies more to specialized buildings such as hospitals, sports buildings, parking lots, theatres and hotels. It is useful to the Valuer through the replacement cost method of valuation, pre-investment studies before the detailed working drawings are prepared, of proposed building projects and in the valuation of the aforementioned specialized kind of properties. The major problem of this method, based as it is on the analysis of past comparable constructions, is the difficult task of computing the unit rate. This involves making allowance for whole range of factors from shape and size of building to constructional methods, materials, finishing and fittings.

Square-metre method of estimating

This method is also known as the superficial/floor area method. The estimate of construction cost is obtained by multiplying the total construction area by a monetary rate. The total floor area of the building is measured between the internal faces of the enclosing external walls with no deduction for internal walls, partitions, stairs, landings, lift shafts, passages, etc. A unit is then calculated per square metre of floor area and the probable total cost of the building is obtained by multiplying the total floor area by the calculated unit rate. The costs of general external works items are calculated separately. The rate is based on current or historical comparable buildings. There are many buildings where the unit of accommodation method is impracticable; such as warehouse projects or open-plan offices. In these cases the superficial floor area method is found to be reliable with an accuracy of 10% to 15%. Also it is possible to have different unit rates for separate areas where there are distinct variability in constructional methods and quality of finish. Consideration must also be given to varying storey heights in assessing unit rates and when extracting rates from cost analysis.

Rough or inclusive-quantities method of estimating

This is a method whereby the important cost items are measured in much the same way as the items in a bill of quantities, except that items of identical or near identical measurement are grouped together. The areas of the earth filling under floors, surface bed, screed, floor finish, etc are not exactly the same but sufficiently similar to permit them to be grouped together.

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Sundry items of little value are not measured but are allowed for as a percentage. Detailed information such as working drawings are required by which time it would be possible to do an estimate using the elemental estimate method, or measure provisional bills of quantities. It can be difficult to decide which items can be ignored and which items are sufficiently costly as to require measurement. It is difficult to judge the percentage of cost to be allowed for sundry items and usually requires a bit of experience and skill. Rough or approximate quantities can be successfully used in supplementing other systems of estimating.

Storey-enclosure method of estimating

This method was introduced as a result of the work of a RICS (Royal Institute of Chartered Surveyors) study group on a new method of a single price rate approximate estimating with the aim of overcoming the drawbacks of the methods so far in use. It consists of measuring certain areas such as the floor area, the roof area, the vertical external wall area, etc. and multiplying each of these areas by a pre-determined factor for each item. Items such as plumbing and sanitary fittings, joinery fittings, etc. are separately measured and estimated. This method is an attempted compromise between the short-comings of the square- metre method of estimating and the time required for the more detailed estimating methods. Ifediora (2009) highlighted the rules in using this method as

- Ground floor area to be multiplied by a weighing factor of 2
- The area of floor measured on plan
- The area of external walls
- The area of Basement floor to be multiplied by a weighing factor of 3
- The area of upper floors multiplied by a factor of 2 plus 0.15nth, *n* representing the number of floors.

Items not directly related to the enclosure by the external walls should be dealt with separately, for example external works; drainage, unusual foundation such as pilling, engineering services and so on. The storey enclosure method is similar to the superficial method and only varies in the more precise measurement of the space enclosed in the building.

Cube method of estimating

The Cube method of estimating involves the calculation of the cubic content of the building using prescribed rules of the Royal Institute of British Architects (RIBA). This method is specific for building projects and aims to overcome the current criticism to the floor area method that does not take into account possible variations of the storey height. In order to use this method, the building volume must be first assessed and explicit rules exist in some countries for that purpose. Buildings with distinct types of occupation should have corresponding volumes assessed separately, for example, car park areas, shopping areas and office areas in a commercial building. Specific works like excavations, foundations and external works ought to be assessed separately by using cost comparisons or approximate quantities, for example. Costs per cubic meter may be difficult to find in countries where the method is not current. Actually, such costs depend on a number of variables, like building types, proportion of wall area per floor area, quality of finishes and so on. Calculation of volume is subject to rules of measurement:

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• Measured from external faces of external walls

• Height of the building is taken from the top of foundation to:

1. For pitched roof:

a. A point midway between the ceiling and the apex of roof 2/3 where roof space is un-occupied.

b. A point three quarters from the ceiling to the apex of the roof where roof space is occupied

2. For Flat roof

a. A point 0.61m (2feet) above the roof structure

All projections such as porches, steps, bays, dormers, projecting roof lights, chimney stacks, tank compartments on flat roof and similar features, shall be measured and added to the cubic content of the main building. The volume of the building so obtained is then multiplied with the unit rate to obtain the cost estimate.

Elemental method of estimating

In this method the building is divided into elements such as foundations, structural frame, external envelope, internal divisions, floor finishes, etc. Each element is sub divided into components. Using superficial or floor area single price rate, the overall unit cost is broken down into elements and sub-elements, thus making it possible to adjust for differences in design and quality of components.

Ifediora (2009) posited that of all the different types of cost estimating mentioned above, the approximate quantities which was not highlighted initially was the most favoured method of cost estimating by quantity surveyors till date. A registered Quantity Surveyor is usually commissioned and uses this method to provide cost estimates for the valuer when the valuation brief involves a major development. This method involves the grouping of bill items of similar areas or lengths and the building up a composite unit to price the items, while allowing percentages from minor items.

Comparative method of estimating

This estimating method takes into consideration the cost of a similar type of building as a basis and then to make cost adjustments for variations in constructional methods and materials. For this purpose, it is advisable to build up costs usually related to a square-meter of finished work for a whole range of alternatives, to enable speedy adjustments to be made when preparing approximate estimates.

Interpolation method of estimating

This is a variant of the comparative method. The estimate of probable cost is produced by taking the cost per square meter of floor area of a number of similar type of buildings from cost analyses and cost records and interpolating a unit rate for the proposed building.

Use of 'as built drawings'

For the purpose of making estimates when making use of DRC method of valuation, one reliable way to achieve this is making use of 'as built drawings'. When a building project is to

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be carried out, the Architect is commissioned or engaged to prepare the drawings of the intended project. As work progresses on site, variations can be encountered which brings about a shift from the initial drawing at the inception of the project. Hence, it is wise that at the completion of the project, the Architect ensures he/she prepares 'as built drawings' of the completed building/property.

In the advent of carrying out valuation using the DRC method, the use of these 'as built drawings' would go a long way in aiding the Quantity Surveyor prepare cost estimates for the Valuer, taking into cognizance, changes in prices of materials and also labour remuneration.

RESEARCH METHODOLOGY

This research paper made use of two basic sources of data collection; primary and secondary data. Above all, the target population was also mentioned. The sources of data included literature from texts, journals, magazines, newspapers and furthermore interviews were also employed in the data collection. The interviews were used to corroborate information and clarify issues raised in the questionnaire. The technique of data collection adopted for the primary source of data is that of well-structured questionnaire to Estate firms. Oral interviews were also conducted with some practicing Estate Surveyors and Valuers who are involved in the practice of valuation. The questionnaire was the most vital method which the researcher used to enable him obtain reliable and detailed information on the subject matter. The questionnaires were distributed to practicing Estate Surveyors and Valuers only.

The target population of this study consists mainly of practicing Estate surveyors and Valuers in Nigeria. This population was further narrowed down to an accessible population that covers the practicing Estate Surveyors and Valuers in Edo, Delta and Ondo states. In the same vein, the financial and time constraints associated with administering questionnaire to the entire population was also considered in narrowing down the population size to a given sample.

Interview was conducted on 10 practicing Estate Surveyors and valuers on the need of Estate Surveyors and Valuersto engage Quantity Surveyors when carrying out DRC method of valuation. Using the random sampling technique it was determined that a total of a total of fifty-nine (59) questionnaire should be distributed for the study.

A total number of 47 questionnaires were filled correctly and returned while 19 questionnaires were not collected due to external factors.

FINDINGS

Table 1. Distribution of Respondents

Group of responses	No of questionnaire sent	No of questionnaire returned	Percentage (%)
EDO	25	23	49
DELTA	20	15	32
ONDO	14	9	19
TOTAL	59	47	100

Source: Author's Field Survey 2015

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From the above Table 1 above, out of 59 questionnaires that were distributed in the three locations, 47 questionnaire which constitute 79% of the total number of questionnaire distributed were returned. 40% of respondents came from Edo state, 25% of respondents came from Delta state while 15% came Ondo state.

Table 2. Number of years in the Estate Surveying and Valuation Profession

RESPONSES	Responses of Estate Surveyors from Edo, Delta and other states	Percentage (%)
Below 5years	15	32
Between 5-10years	13	28
Above 10years	19	40
TOTAL	47	100

Source: Author's Field Survey 2015

From Table 2 above, 32% of the respondents show below 5years, 28% show between 5-10years while 40% of the respondents show above 10 years. The conclusion drawn here is that majority of the Estate Surveyors and Valuers in Nigeria today have been practicing for a very long time.

Table 3. Respondents engaged in valuation of property using the DRC method

RESPONSES	Responses of Estate Surveyors from Edo, Delta and Ondo states	Percentage (%)
Yes	47	100
No	0	0
Total	47	100

Source: Author's Field Survey 2015

From Table 3 above, 100% of the respondents admitted they carry out valuations using the DRC method while 0% show no response. The conclusion drawn here is that all registered Estate Surveyors and Valuers in Nigeria carry out valuations using the DRC method.

Table 4. Number of Respondents with the knowledge of current cost Estimating methods

RESPONSES	Responses of Estate Surveyors from Edo, Delta and Ondo states	Percentage (%)
Yes	10	32
No	30	64
Indecisive	7	15
Total	47	100

Source: Author's Field Survey 2015

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From Table 4 above, 32% of the respondents are aware of the current cost estimating methods used in determining re-instatement cost when carrying out valuation using the DRC method, 64% of the respondents are not aware of such cost estimating methods while 7% of the respondents could not come to a conclusion about the knowledge of such cost estimating methods. The conclusion drawn here is that majority of Estate Surveyors & Valuers are not aware of the current cost estimating methods available for use in the valuation of properties when using the DRC method.

Table 5. Respondents' Methods of determining Reinstatement Cost when using the DRC method for Valuation

RESPONSES	Responses of Estate Surveyors from Edo, Delta and Ondo states	Percentage (%)
Use of Comparables from judgment and experience	14	30
From other Estate Surveyors and Valuers	20	43
Use of current cost estimating methods	8	17
Engage the services of registered Quantity Surveyors	5	11
TOTAL	47	100

Source: Author's Field Survey 2015

From Table 5 above, 30% of the respondents determined reinstatement cost from similar properties that they had valued before, personal judgment and experience. 43% of respondents admitted to determining reinstatement cost by interacting with other Estate Surveyors and Valuers while only 11% of the respondents actually engaged the services of Quantity Surveyors when determining reinstatement cost. From the above, it can be inferred that majority of Estate Surveyors and Valuers do not engage the services of registered Quantity Surveyors.

Table 6. Respondents opinion on how often they engage the services of Quantity Surveyors when carrying out Valuations of major works involving the use of the DRC method

RESPONSES	Responses of Estate Surveyors from Edo, Delta and Ondo states	Percentage (%)
Very often	10	21
Rarely	8	17
Never	29	61
TOTAL	47	100

Source: Author's Field Survey 2015

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From Table 6 above, 21% of the respondents admit that they make use of the services of Quantity Surveyors when carrying out major works involving the use of the DRC method, 17% of the respondents admit that the rarely make use of Quantity Surveyors while 61% of the respondents admit that they never make use of Quantity Surveyors in the valuation of major works involving the use of the DRC method. The conclusion drawn from the above is that Estate Surveyors and Valuers hardly ever use Quantity Surveyors when carrying out valuation of major works involving the use of the DRC method.

Table 7. Respondents' view on the need for Estate Surveyors and Valuers to work with Quantity Surveyors to improve Valuations involving the use of the DRC method

RESPONSES	Responses of Estate Surveyors from Edo, Delta and Ondo states	Percentage (%)
Yes	39	82
No	8	17
TOTAL	47	100

Source: Author's Field Survey 2015

From Table 7 above, 82% of the respondents agreed that Estate Surveyors need to work with Quantity Surveyors to improve valuations involving the use of the DRC method while 17% of the respondents didn't see the need to involve Quantity Surveyors to improve the outcome of their valuations when using the DRC method. It can be inferred from the above that a vast majority of Estate Surveyors &Valuers see the need to work with Quantity Surveyors to improve the quality of their valuations when using the DRC method.

Table 8. Valuations involving the use of the DRC method would be more accurate with the input of Quantity Surveyors

RESPONSES	Responses of Estate Surveyors from Edo, Delta and Ondo states	Percentage (%)
Strongly Agree	25	53
Agree	10	21
Strongly Disagree	5	11
Disagree	4	9
Uncertain	3	6
Total	47	100

Source: Author's Field Survey 2015

From Table 8 above, 53% of respondents Strongly Agree that valuations involving the use of the DRC method will be more accurate with the input of Quantity Surveyors. 21% Agree, 11% Strongly Disagree, 9% Disagree and 6% are uncertain. It can therefore be inferred that Estate Surveyors believe that their valuations involving the use of the DRC method will be more accurate with input from Quantity Surveyors.

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Table 9. Respondents' opinion to whether Estate Surveyors and Valuers need more training in the area of Cost Estimating

RESPONSES	Responses of Estate Surveyors from Edo, Delta and Ondo states	Percentage (%)
Strongly Agree	26	55
Agree	8	17
Strongly Disagree	6	12
Disagree	5	11
Uncertain	2	6
Total	47	100

Source: Author's Field Survey 2015

From Table 9 above, 55% of respondents Strongly Agree that Estate Surveyors &Valuers need more training in the area of cost estimating involving the use of the DRC method. 21% Agree, 11% Strongly Disagree, 9% Disagree and 6% are uncertain. The above analysis shows that Estate Surveyors &Valuers are of the Strong opinion that they need more training in the area of cost estimating.

From the above findings, it was established from majority of the respondents that there was a need for Estate Surveyors to improve on their knowledge of current cost estimation methods.Also evidence from the respondents shows that most times Estate Surveyors and Valuers determine unit cost of a building either by face value or degree of finishingof the property. This they do buy calling up their colleagues who might be familiar with the location of the subject property and just by oral description of the subject property, the level of finishing, and comparisons with a comparable property that shares similar characteristics with the subject property and has probably been valued before, a unit cost of construction is gottenHardly were Quantity Surveyors engaged when the issue of replacement costs of a property was to be determined in the valuation process.It was also deduced from the findings above that the few respondents who made use of Quantity Surveyors when carrying out valuation using the DRC method had more accurate results that even those who rarely or never made use of Quantity Surveyors opined that more accurate results would be achieved in the valuation process using the DRC method if Quantity Surveyors were engaged. This is evidenced by the percentage of respondents who strongly agreed that there was need for Estate Surveyors and Valuers to work hand in hand withQuantity Surveyors to ensure that their valuations using the DRC method are more accurate. An interview with Dr. Ogedengbe, an Estate Surveyor and Valuer and a lecturer at the department of Estate Management, University of Benin alluded to the fact that most Estate Surveyors &Valuers are not aware of the basic methods of cost estimating and how to even calculate using such methods. He also made mention of the fact that the Estate Management and Valuation profession is one domiciled in the built-up sector and saw no reason why we should not engage the services of the Quantity Surveyors whose job it is to determine replacement cost when carrying out valuations of properties using the DRC method. He concluded that the Nigerian Institution of Estate Surveyors and Valuers (NIESV) in conjunction with the Nigerian Institute of Quantity Surveyors (NIQS) should organize MCPDs and regular seminars for their members to improve their knowledge on the current methods of cost estimation. From the respondents it can also be deduced that Estate surveyors and valuers need to broaden their horizon more and put in personal effort to research on current trends and

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methods of cost estimating so that the valuations they carry out using the DRC method can stand the test of time.

Test of Hypothesis

H_0: Valuations involving the use of the DRC method will not be more accurate with the input of Quantity Surveyors in cost estimating.

H_1: Valuations involving the use of the DRC method will be more accurate with the input of Quantity Surveyors in cost estimating.

Using data from Table 9 (question 9) which will be our focal point in testing our hypothesis and given a chi-square (X^2) approach in testing the hypothesis with a 95% level of confidence, a 5% i.e. 0.05 level of tolerable error with a degree of 4, the X^2 critical table value is 9.49.

Decision Rule: Since the calculated chi-square i.e. X^2 =35.46 is greater than the critical table value of 9.49, we therefore reject H_0 and accept H_1

Hence from the above, it can be deduced that valuations will be more accurate if Quantity Surveyors are engaged by Estate Surveyors and Valuers to provide replacement cost estimates whenever the DRC method of valuation is to be employed.

RECOMMENDATIONS AND CONCLUSION

From the above findings, it is clear that there are problems militating against the use of the DRC method by Estate Surveyors and Valuers in Nigeria today especially the problem of estimating cost. This is because Valuers do not possess the basic skills to determine the reinstatement cost in accurately valuing properties using the DRC method. The Quantity Surveyors are responsible for accurately determining cost estimates of buildings and there is need for Estate Surveyors and Valuers to work in tandem with them to ensure that valuations using the DRC method are able to stand the test of time. Gone are the days when valuation reports were accepted without scrutiny, these days because of the nature of the Nigerian economy, financial institutions need to be certain that prospective loan seekers have the required collateral (which most of the time is building), to service the loans granted them.In the light of these, it is recommended that NIESV in conjunction with NIQS should organize seminars to educate Estate Surveyors and Valuers on current cost estimating methods. On their own part, Estate Surveyors and valuers should always seek out the services of Quantity Surveyors when in doubt about the unit cost of a building to be valued so as to ensure that the desired results are achieved. No man is an island of knowledge and as such Estate Surveyors &Valuers should endeavor to brush up their knowledge and interact with those professionals in the built-up sector. It is an open secret in Nigeria today that very few tertiary institutions offer Quantity Surveying as a course. Even the ones offering, do not have Estate Management students offering any courses in Quantity Surveying, hence the ignorance on the part of Estate Surveyors and Valuersabout the functions of Quantity Surveyors and requisite knowledge required in cost-estimating when carrying out valuation using the DRC method. On the part of NIQS andthe Quantity Surveyors Registration Board of Nigeria (QSRBN), more campaigns should be geared towards enlightening the public on the roles of Quantity Surveyors in the society. NIQS should also work closely with government and the Nigerian University

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Commission (NUC) to see how the study of Quantity Surveying can be introduced to more universities. ESVARBON (Estate Surveying and Valuation Registration Board of Nigeria) the body in charge with setting up curriculum for the study of Estate Management in universities in Nigeria needs to review the present curriculum together with the NUC and incorporate the study of certain courses in Quantity Surveying especially in the preliminary and intermediary years of the life of the Estate Management undergraduate so he/she can be grounded in some aspects of the Quantity Surveying profession. The built-up profession is an inter-disciplinary one and the exchange of knowledge between all professions in it should be welcomed and greatly encouraged.

The DRC method starts with determining the re-instatement cost before even a rate of depreciation is applied and the value of land is added to determine the fair value of such a property. It is therefore important that the Nigerian Valuer strives to think globally and act locally, work in tandem with other professionals in the built-up sector, especially the Quantity Surveyor as regards cost estimates and in so doing keep with the tenets the Royal Institute of Chartered Surveyors (RICS) have set out in their hand book as regards valuation of properties using the DRC method.

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