AN APPRAISAL OF VALUE MANAGEMENT PRACTICE IN CONSTRUCTION PROJECTS DELIVERY IN NIGERIA

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Abstract: A successful project requires timely delivery within budget and specification. This is often not achieved in construction projects. Value management is a structured approach to identifying the functions of a project, and providing the necessary functions to meet the required performance at the lowest overall cost, it adds value to construction projects but not widely adopted. This research work assessed Value Management practices in construction project delivery in Nigeria by examining the practices and barriers to its application in Nigerian Construction projects. The survey Research design was adopted for the study. A structured questionnaire was administered to consultants (Architects, Quantity Surveyors and Engineers). A total number of 358 questionnaires were sent out and 103 were completed and returned. The data collected was analyzed using descriptive and inferential statistics using SPSS 21. The findings indicated that cost management practice and business case management Practices ranked the highest with a mean of 4.20 and 4.10, respectively. Fear of incurring additional cost due to value management study is the highest barrier with a mean of 4.33. The factor analysis result classified the barriers identified in to 6 compartments. The result shows that personnel barrier accounts for 37.50% of the barriers identified. Strategies for trainings on Value management should be encouraged for effective delivery of construction projects.

Keywords: Barriers, construction, projects, value, value management

Introduction

Value management is a structured, organized team approach to identifying the functions of a project, product, or service with recognized techniques and providing the necessary functions to meet the required performance at the lowest overall cost (SAVE International, 2019). Although some schools of thoughts tend to distinguish value management from other relevant terms such as value engineering and value analysis, it is more widely accepted that the term value management can be used to represent other related value methodologies (Lam *et al.,* 2013). Value Engineering was introduced to the construction industry by the United States Department of Defense and Navy in 1960. According to Nelly *et al.* (2014), Value Management (VM) practice has been adopted by several developing countries including United Kingdom, China and Australia.

The construction industry plays a vital role in Nigeria's economic growth and development. It is also responsible for a large portion of total fixed capital investments (Olatunde *et al.*, 2017). However, the Nigerian construction industry can easily be described as not meeting expectations in regards to its customer satisfaction and service delivery to clients (Kolo and Ibrahim, 2010). The Nigerian Construction Industry is also responsible for employing approximately 8 million people, having a population of approximately 140 million and this represents approximately 20% of Nigeria's workforce (National Bureau of Statistics, 2016) perhaps, making it the largest employer of construction labor in Africa. In spite of its size, Nigerian construction industry has severally been described as being unable to deliver (Kolo and Ibrahim, 2010). Dallas (2016) notes that a successful project of any type requires that the outcome is clearly defined (requirements) and communicated to those delivering the project (the team). Adoption of value management brings substantial benefits for promoting sustainable construction principles. The principles and techniques of value management can provide the required quality to realize an optimal whole life cost and life-cycle assessment during the process of developing a project (Shehu & Abubakar 2018). Yong & Zulzun (2011) stated that Value Management approach offers a crucial method for the client to achieve a better built environment and good chance to encourage upgrading in the construction process. They further stated that

the essence of optimal usage is strongly related with the philosophy of Value Management, which is applied to satisfy value for money in building and infrastructure projects (Sum *et al.*, 2015). Value management is a vital instrument for breaking existing observations, prompting stakeholders to take a fresh approach to problem solving and assisting in setting out tasks and objectives with value for money at the back of their mind (Babatunde *et al*, 2010).

The Nigeria construction industry is characterized with lack of capacity to deliver optimally as a result of poor service delivery which creates dissatisfaction amongst clients according to Adewole & Johnson (2015) and Adewuyi (2017). In 2007 the Federal Government of Nigeria Stipulated that procurement of public assets and services must be through the application of value for money standard and practices in order to improve service delivery, value Management has been adopted by public sectors in many countries in order to optimize public projects, to ensure that they achieve their objectives and to achieve value for money invested. Despite the benefits of VM, it is not embraced in majority of developing countries (Kim *et al.*, 2016). The Nigerian construction industry is yet to fully embrace value management techniques despite its advocacy. Thus, this study as carried out to assess Value Management practices in the Nigerian Construction Industry. This was achieved by assessing value management practices and establishing the barriers to its implementation in Nigerian construction Industry.

Construction projects involve several professionals and organizations coming together to produce a construction product based on the objectives and goals of the client (Wahab, 2006). The value engineering process could lead to the achievement of project goals at reduced costs. Concurrent with the wide spread popularity, the process of value engineering has undergone improvements through the integration of several tools and techniques aimed at making the process more effective, efficient, flexible and more attractive to stakeholders internationally in both the private and public sectors (Ellis *et al.*, 2015).

The concept of value management

Value: To understand the concept of value management better, there is the need to first of all understand the concept of value. Value is defined as the quantum of needs achieved at

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minimum cost. Therefore, the greater the satisfaction of needs and the more minimal the cost, the greater the value achieved (Kim *et al.*, 2016). Yu *et al.* (2016) discourses the concept of value and established that value relies on the relationship between the satisfaction of many differing needs and the resources used in doing so; the fewer the resources used or the greater the satisfaction of needs, the greater the value.

Value management: Researchers and scholars have defined value management in different ways. Oke and Ogunsemi (2011) defined value management as a systematic and multidisciplinary process directed towards analyzing the functions of projects from its inception to completion and commissioning (through auditing or examination) for the purpose of achieving best value and return on investment at lowest possible overall life cycle cost. Shehu & Abubakar (2018) defined value management as a style of management particularly dedicated to motivate people, develop skills and promote synergies and innovation, with the aim of maximizing the overall performance of an organization. These definitions point to the fact that value management encourages team work by improving working relationship among the team while at the same time improves service delivery by achieving better value for money for the projects.

Value management in the construction industry

Value management enhances the value of construction projects (Madushika *et al.*, 2020). Reports from Latham (1994) and Egan (1998) highlighted some problems facing the construction industry in the UK which are commonly shared by construction industries worldwide. The reports are highly regarded and widely applied (Kim *et al.*, 2016). It also challenged the construction industry to change its mindset and attitudes towards the provision of construction assets and motivates the construction industry to adopt new concepts and utilize innovative techniques towards improving the performance of the industry. Problems facing the construction industry include the fact that construction projects are not completed on time, within budget and to the required quality and therefore clients of the construction industry are not satisfied with the services provided by the industry (Aibunu, 2008; Olatunji, 2006). Other problems facing the construction industry includes the lack of client involvement in projects, the use of traditional procurement routes, lack of attention to client needs, conflicts existing in construction projects, high costs of construction, low profit margins in construction companies/firms, health hazards and wastes, high risks, lack of trust among stakeholders of the industry leading to disputes and claims, poor communication and lack of research and innovation among a host of other problems were seen to limit the efficiency and effectiveness of the construction industry (Latham, 1994; Egan, 1998; Ellis *et al.*, 2015)

Various researches were undertaken and several concepts were developed in order to improve the efficiency and performance of the construction industry. Such concepts and techniques include the move towards collaborative procurement routes, Prequalification, quality assurance, increased education, multi skilling, whole life cycle costing, lean thinking, partnering. Gough (2008) acknowledged that although these concepts improved the performance of the construction industry, some problems still persist; some of these problems include poor communication, lack of trust and unrealistic strategic project objectives and estimates among others. According to Kumaraswamy and Cheng (2008), value management will increase the client values when it is involved with integrated and collaborative procurement routes. This is made possible through the utilization of a team-based approach in the value management process which can lead to better trust, understanding and communication among the stakeholders in the project. Value management creates a very conducive environment in which collaborative and integrative

procurement routes can be formed. It also provides the opportunity to analyze and make decisions concerning the selection of the right procurement route to adopt for a construction project. Value management also makes it possible to create long term relationships and motivates stakeholders to adopt integrative and collaborative procurement routes (Zou *et al.*, 2008; Kumaraswamy and Chung, 2008).

Practices are observable facets that are measurable (Valmohammadi & Roshamir, 2015). The following Value Management Practices were identified by Shehu & Abubakar (2018); Sum *et al.* (2015); Nelly *et al.* (2014), Kim *et al.* (2016) as strategic planning, business case management, benefits management, cost management, risk management, knowledge management, stakeholder management, change management, role management effective communication and training and development,

Strategic planning: This is the process an organization adopt to define its strategy or direction and take decision on allocating its resources to pursue this strategy. It may also extend to control mechanisms for guiding the implementation of the strategy. It involves identification of investment opportunities and aligning the opportunities with established strategies and objectives (Kumaraswamy & Cheung, 2008)

Business case management: This Captures the reasoning for initiating a project or task. It is often presented in a well-structured written document, but may also come in the form of a short verbal agreement or presentation. The Reason for the business case is that, whenever resources such as money or effort are consumed, they should be in support of a specific business need. It includes directs sponsors to formally structure an initial investment opportunity aimed at strategizing and prioritizing effectively all through the duration of the investment lifecycle (Ellis *et al.*, 2015).

Benefits management: This can be referred to as the initiating, planning, organizing, executing, controlling, transitioning and supporting of change in the organization and its consequences as incurred by project management mechanisms to realize predefined project benefits. It can also be viewed as a set of processes structured to close the gap between strategy planning and execution by ensuring the implementation of the most valuable initiatives. It enhances the identification measurement and active management of both immediate and business benefits over the investment lifecycle and establishes future benefit opportunities (Othman *et al.,* 2005).

Cost management: A systematic set of procedures for recording and reporting measurements of the cost of manufacturing goods and performing services in the aggregate and in detail. It includes methods for recognizing, classifying, allocating, aggregating and reporting such costs and comparing them with standard costs. This ensures that the client's budget is not exceeded while ensuring that quality is not compromised and client gets value for his money (Shen & Lui, 2003).

Risk management: This is the identification, evaluation, and prioritization of risks (the effect of uncertainty on objectives) followed by coordinated and economical application of resources to minimize, monitor, and control the probability or impact of unfortunate events or to maximize the realization of opportunities. It boosts the identification, measurement and management of risks to reduce risks and manage the impact of identified and unidentified risks when they occur (Othman, Hassan & Pasquire, 2005).

Knowledge management: is the process of creating, sharing, using and managing the knowledge and information of an organization. It refers to a multidisciplinary approach to achieve organizational objectives by making the best use of knowledge. It involves creating, effective management,

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records and transfer of data collected during projects to ensure that they are available when needed in future projects (Omoregie & Radford, 2006)

Stakeholder management: It is a critical component to the successful delivery of any project, programme or activity. A stakeholder is any individual, group or organization that can affect, be affected by, or perceive itself to be affected by a programme. It ensures alignment of objectives, values and expectations between internal and external stakeholders on the basis of dialogue based empowered relationships (Alalshikh & Male, 2011).

Change management: It is a collective term for all approaches to prepare, support, and assist individuals, teams, units and organizations to make changes within their organization. The most common change drivers include: technological evolution, process reviews, crisis, and consumer habit changes; pressure from new business entrants, acquisitions, mergers, and organizational restructuring. This is employed to motivate change, crate a vision, develop political support and manage transition to sustain thrust throughout the operations (Wimmer & Domnick, 2011)

Role management: refers to the set of activities required to develop roles initially and to maintain role definitions over time: Defining new roles and their associated assignment rules; changing role definitions and assignment rules. Periodically reviewing and updating the set of security entitlements this recommends clear role description among internal and external parties involved in organization of investments. The process leads to a clear understanding of who is responsible and accountable in the projects (Kim *et al.*, 2016).

Effective communication: It is defined as verbal speech or other methods of relaying information that get information. The essence of effective communication is for the receiver to understand instructions given on specific assignments. Goals and objectives must be decided and when done, they must be communicated to the appropriate personnel who will carry out the results of the decisions taken (Sum *et al.*, 2015).

Training and development: This refers to educational activities within a company created to enhance the knowledge and skills of employees while providing information and instruction on how to better perform specific tasks. This encompasses skills development and expertise required for the project ensuring that adequate technical personal and managerial skills are available when required (Omoregie & Radford, 2006).

Materials and Methods
This research reviewed literature on value management practices and highlights the importance of evaluating the practices where the desired results are not achieved. The survey approach was adopted for this research. Response to the research questions assessed value management practices in Nigerian construction projects and barriers to its successful adoption in Nigeria. The data collection process points towards the positivism research philosophy and the deductive research approach. This further points towards the survey strategy since it also allows the collection of large data from population. The survey method has been adopted in similar researches (Oke *et al.*, 2011). The study focuses on consultants (Project Managers, Architects, Quantity Surveyors and Engineers) involved in construction projects, total number of consultants in Nigeria is unknown thus, the formula by Smith (2011) was adopted. A total of 358 questionnaire was administered and 173 retrieved. To achieve the objectives of this research information on VM practices and barriers to VM was sought from respondents. The questionnaire was divided into three section to provide empirical evidence to answer the research questions. The first section of the questionnaire constitutes questions on personal information of the respondents. The second section of the survey instrument examined VM practices while the third section evaluated the barriers to VM implementation in Nigerian Construction Projects. Respondents were asked to indicate their agreement or disagreement on the existence of the identified VM practices in their projects. Points Likert scale was used to calculate the mean of the practices. Likert scale was used for each item measured 5 Points representing Strongly Agree and 1 point Strongly Disagree. The descriptive analysis of the data collected were analyzed using SPSS version 21 and was also employed to run confirmatory factor analysis of the barriers identified.

Results and Discussion
The results of the data analyzed is presented in Tables 1 to 3. Table 1 shows the results of the VM practices. 12 practices were identified from literature. The findings indicate that cost management practice ranked the highest with a grand mean of 4.20. Cost implication of any project is of vital importance to the client. To satisfy the client, projects must be delivered to the satisfaction of the client and must achieved value for money. The finding corroborates the findings of Aliyu & Abdulrahaman (2018). The results of the research also indicated that cost management is vital in VM. Business case management ranked next with a grand mean of 4.10 while effective communication ranked third with a grand mean of 3.96. The place of effective communication cannot be over emphasized in any project. Thus, communication must be given priority in VM. The findings confirm the findings of (Saleh *et al.*, 2016). Change management ranked the lowest with a grand mean of 3.66. This confirms the findings of Balah & Olugbenga (2017) whose findings identify change management as low in the research undertaken.

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Table 1: VM practices

S/N	Practice	Mean	Standard Deviation
A	**Strategic planning**		
1	Identification of investment opportunities	3.83	0.618
2	Alignment of opportunities identified objectives	4.50	0.738
3	Ensures strategies are implemented and achieved	3.50	0.797
	GRAND MEAN	**3.94**	
C	**Business case management**		
4	Directs sponsors to formally structure an initial investment opportunity	4.14	0.745
5	Prioritizing investment opportunities	3.86	0.718
6	Effective monitoring all through the investment lifecycle	4.29	0.667
	GRAND MEAN	**4.10**	
D	**Benefits management**		
7	Identification of business benefits over investment life cycle	2.13	0.704
8	Measurement of business benefits over investment lifecycle	4.33	0.524
9	Establish future benefit opportunities	4.67	0.757
	GRAND MEAN	**3.71**	
E	**Cost management**		
10	Ensures that the client's budget is not exceeded	4.43	0.762
11	Ensuring that quality is not compromised	3.99	0.696
12	Client gets value for his money	4.17	0.709
	GRAND MEAN	**4.20**	
F	**Risk management**		
13	Boosts identification of risks	3.71	0.023
14	Ensure measurement and management of risks	3.86	0.039
15	Mange the impact of identified and unidentified risks when they occur	4.13	0.135
	GRAND MEAN	**3.90**	
G	**Knowledge management**		
16	Creating, effective management, records	3.71	0.386
17	Transfer of data collected during projects	4.09	0.123
18	Ensure that they are available when needed in future projects	3.87	0.114
	GRAND MEAN	**3.89**	
H	**Stakeholder management**		
19	Ensures alignment of objectives between stakeholders	4.33	0.808
20	Ensures alignment of expectations between stakeholders	4.09	0.860
21	Dialogue based empowered relationships between stakeholders	3.15	0.785
	GRAND MEAN	**3.86**	
I	**Change management**		
22	Employed to motivate change and create a vision	4.29	0.329
23	Develop political support	3.71	0.284
24	Manage transition to sustain thrust throughout the project	2.98	0.299
	GRAND MEAN	**3.66**	
J	**Role management**		
24	Recommends clear role description in projects	4.19	0.204
26	Identifies who is responsible for actions	3.31	0.335
27	Identifies who is accountable for actions	3.98	0.404
	GRAND MEAN	**3.83**	
K	**Effective communication**		
28	Goals and objectives must be decided	4.01	0.299
29	Goals and objectives must be communicated	3.75	0.227
30	Actions must be evaluated to ensure effective communication	4.12	0.426
	GRAND MEAN	**3.96**	
L	**Training and development**		
31	Development of skills required for the project	3.67	0.457
32	Sourcing for experts in the required fields	4.01	0.665
33	Ensures competent personnel are available when needed	3.55	0.858
		3.74	

Source: Field Survey (2019)

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Table 2: Barriers to VM implementation

S/N	Barriers	Mean	STD DEV	Ranking
1	Fear of incurring additional cost due to value management study	4.33	0.830	1
2	Lack of VM team competence to accurately estimate costs	4.21	0.853	2
3	Defensive attitude of original design team	4.17	0.826	3
4	Lack of cooperation and interaction with internal VM team	4.17	0.833	4
5	lack of encouragement on the part of the government	4.13	0.825	5
6	Unqualified VM facilitator	4.11	0.624	6
7	Inexperienced and incompetent VM team members	4.06	0.597	7
8	Complexity of proposed projects to apply VM experts' opinion	4.00	0.841	8
9	Lack of VM experts	4.00	0.885	9
10	Wrong notion that VM reduces a projects scope	3.88	0.873	10
11	Lack of gathered information in early stage causing difficulties in creating ideas and alternatives	3.83	0.636	11
12	Lack of local VM guidelines as well as technical norms and standards	3.83	0.509	12
13	Wrong beliefs that value management impedes or delays projects	3.83	0.782	13
14	Lack of commitment to implement VM	3.83	0.792	14
15	Lack of time to conduct VM studies	3.79	0.449	15
16	Lack of support and active participation from owners and stakeholders	3.50	0.867	16
17	Inexperienced and incompetent contractors experts' opinion	3.50	0.871	17
18	Lack of investments, support policies and human resources to conduct VM in construction companies experts' opinion	3.50	0.895	18
19	Difficulties conducting analysis and evaluating alternatives	3.50	0.599	19
20	Lack of legislation providing for application of VM in the construction industry	3.50	0.736	20
21	Lack of knowledge about VM	3.33	0.813	21
22	Inadequate training and management support	3.33	0.826	22
23	Too few construction projects applying VM experts' opinion	3.28	0.871	23
24	Lack of contract provisions for implementation VM between owners	2.50	0.897	24

Source: Field Survey (2019); **STD DEV** = Standard Deviation

Table 2 shows the results of the barrier of VM adoption on Nigerian construction projects. The results show that Fear of incurring additional cost due to value management study ranked the highest with a mean of 4.33, followed by Lack of VM team competence to accurately estimate costs with a mean of 4.21 while Defensive attitude of original design team and Lack of cooperation and interaction with internal VM team both ranked third with an equal mean of 4.17. The results also show that Lack of contract provisions for implementation VM between owners ranked the lowest with a mean of 2.50.

Factor analysis was conducted on the data collected to group the identified barriers. The first step is to run a correlation matrix to determine how appropriate a factor analysis on the data was determined. Factors with less than 0.3 correlation were excluded. The result shows that no factor was below 0.3; thus no factor was eliminated. The result of Kaiser-MeyerOlkin (KMO) test result indicates a result greater than 0.5 indicates that the data is suitable for factor analysis. The communality of all the barriers were found to be greater than 0.500. The factors were then subject to factor analysis with principal component analysis. The minimum eigen-value, known as the Kaiser's criterion was adopted. Factors with loadings greater than 0.5 are considered significant in contributing to the interpretation of the component; factors with loadings less than 0.5 are considered insignificant (Hair *et al.*, 2010).

Table 3: CFA of VM barriers

S/N	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6
10	0.832					
13	0.871					
21	0.841					
1		0.813				
2		0.867				
11			0.897			
12			0.597			
5				0.624		
20				0.636		
24				0.599		
3					0.449	
4					0.509	
6					0.446	
7					0.580	
8					0.695	
9					0.585	
14					0.634	
15					0.588	
16					0.575	
17						0.740
18						0.724
19						0.730
22						0.638
23						0.714

Source: Field Survey (2019); **Comp**= Component

Component 1: Level of awareness
This accounts for 12.5% of the total variance in the barriers identified. The barriers are wrong notion that VM reduces a projects scope, wrong beliefs that value management impedes or delays projects, Lack of knowledge about VM. The lack of knowledge about VM and its minimal use in the sector can be

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viewed from the practical and theoretical knowledge, theoretical knowledge as thought in schools supersedes practical knowledge of adopting VM. This may result in the parties' lack of interest and confidence in VM as a strategy. Thus, if the parties question the effectiveness of VM and express concern regarding the amount of time and money needed to implement it, it is likely that VM as a strategy will not be positively received, and hence, there will be a lack of support and active participation by the relevant parties in VM.

Component 2: Cost
Barriers relating to cost cover 8.33% of the total variance in the factors identified. The factors are fear of incurring additional cost due to value management study, Lack of VM team competence to accurately estimate costs. The cost implication of implementing VM is sometimes a consideration especially when it is not a requirement, with respect to the designers, spending time, cost, and manpower to implement VM is usually not a consideration because it will reduce their profits, especially given that the design fee as calculated for the total project cost.

Component 3: Documentation
This also covers 8.33% of the total variance of the barriers under consideration. The barriers include Lack of gathered information in early stage causing difficulties in creating ideas and alternatives, Lack of local VM guidelines as well as technical norms and standards. Technical norms and standards are considered as manual documents that are necessary for the implementation of VM. A lack of practical guidelines for implementing VM in the construction industry is a key factor blocking the wide application of VM (Shen and Liu, 2004) because the theoretical knowledge from books and articles is not sufficient for ensuring the correct implementation of the VM procedure.

Component 4: Government
This covers 12.50% of the total variance in the barriers identified. The barriers include lack of encouragement on the part of the Government, Lack of legislation providing for application of VM in the construction industry, Lack of contract provisions for implementation VM between owners. That VM, as a technique, when backed up with legislation and applied to all construction projects will ensure effective maximization of function and removal of unnecessary costs. Governments, construction authorities, and regulators should play a lead role in promoting VM and should consider creating and establishing VM implementation based on law, as currently practiced in developed countries across the world. When this is not in place it affects the implementation of VM. There are many related difficulties when applying this methodology if there is not government legislation regulating its application.

Component 5: Personnel
This covers 37.50% of the variance in the factors. Personnel barriers ranked highest amongst the 6 components grouped by factor analysis. The barriers include Defensive attitude of original design team, Lack of cooperation and interaction with internal VM team, Unqualified VM facilitator, Inexperienced and incompetent VM team members, Complexity of proposed projects to apply VM Experts' opinion, Lack of VM experts, lack of commitment to implement VM, lack of time to conduct VM studies, Lack of support and active participation from owners and stakeholders. In respect to construction projects in Nigeria it is necessary to have an abundance of human resources with experience and knowledge about VM who will promote and develop VM in the domestic construction industry. To accomplish this, an active foreign certification system, such as Certified Value Specialist, Associate Value Specialist, and Value Methodology Practitioner, granted by SAVE International, and the training of more VM experts are recommended.

Component 6: Technical
This covers 20.83% of the total barriers identified. The barriers include Inexperienced and incompetent contractors Experts' opinion, Lack of investments, support policies and human resources to conduct VM in construction companies Experts' opinion, Difficulties conducting analysis and evaluating alternatives, inadequate training and management support, Too few construction projects applying VM Experts' opinion. For effective adoption of VM methodology the requisite technical requirements must be in place.

Conclusion
This paper assessed VM practices and barriers in Nigerian Construction Industry. The study identified 12 practices and 21 barriers. The mean value and grand mean of the practices were computed while the barriers where ranked according to their mean. Cost management practice ranked the highest, xx ranked second while xx practice ranked the lowest. The three highest barriers are Fear of incurring additional cost due to value management study, Lack of VM team competence to accurately estimate costs, Defensive attitude of original design team and Lack of cooperation and interaction with internal VM team. The study further classified the barriers into 6 components based on the result of the confirmatory factor analysis. Personnel barriers ranked the highest followed by technical barriers. The findings of this study can assist practitioners in the Nigerian construction industry identify barriers to VM adoption so strategies can be provided to firm for its adoption. Great effort should be made to train and educate practitioners in the industry through workshops so the benefits of VM can be harnessed. In additional to that, procedures that are consistent with the characteristics of the Nigerian Construction industry should be established. Appropriate legislations related to VM application should be adopted.

Conflict of Interest
Authors declare that there is no conflict of interest related to this work.

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