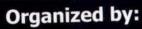
# Proceding International Joint Seminar

**Muslim Countries and Development:** 

**Achievements, Constraints and Alternative Solutions** (Multi-Discipline Approach)

Yogyakarta, 2<sup>nd</sup> December 2006









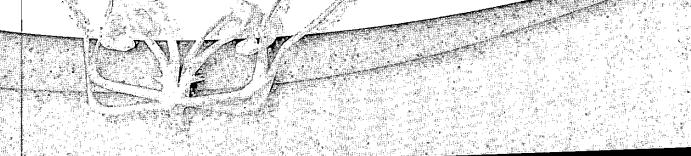
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# Proceeding International Joint Seminar

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# Organized by:



Universitas Muhammadiyah



International Islamic University



Education and Cultural Attache Embassy of The Republi Indonesia in Malaysia

# MESSAGE FROM THE RECTOR OF UNIVERSITAS MUHAMMADIYAH YOGYAKARTA (UMY)

Assalamu'alaikum warahmatullahi wabarakatuh

All praise be to Allah SWT, Lord of the world. Peace and blessings on Muhammad SAW, His Servants and Messenger.

First of all, as the rector of Universitas Muhammadivah Yogyakarta (UMY), I would like to welcome to the honourable guests, Rector, Dean of Postgraduate Studies (CPS), Dean of ISTAC, Dean of IRKHS, Deputy Deans and Head Departments from various Kulliyah, lecturers, postgraduate students of International Islamic University Malaysia (IIUM), and all participants in this joint seminar.

Academic cooperation between UMY and IIUM started several years ago. The cooperation between us is based on a solid foundation; both us are Islamic universities having same missions to develop Islamic society, to prepare future generations of Islamic intellectuals, and to cultivate Islamic civilization. In fact, improving academic quality and strengthening our position as the producers of knowledge and wisdom will offer a meaningful contribution to the development of Islamic civilization. This responsibility is particularly significant especially with the emergence of the information and knowledge society where value adding is mainly generated by the production and the dissemination of knowledge.

Today's joint seminar signifies our attempts to shoulder this responsibility. I am confident to say that this joint program will be a giant step for both of us to open other pathways of cooperation. I am also convinced that through strengthening our collaboration we can learn from each other and continue learning, as far as I am concerned, is a valuable ingredient to develop our universities.

I sincerely wish you good luck and success in joining this program

Wassalamu'alaikum Wr, Wb.

Dr. Khoiruddin Bashori

Rector, UMY

# MESSAGE FROM THE RECTOR OF INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM)

Assalamu'alaikum warahmatullahi wabarakatuh

In the name of Allah, the most Gracious and the most Merciful. Peace and blessings be upon our Prophet Muhammad (S.A.W).

First and foremost, I felt honoured, on behalf of the university to be warmly welcomed and to be given the opportunity to work hand in hand, organizing a respectable conference. Indeed, this is a great achievement towards a warmers bilateral tie between the International Islamic University Malaysia (IIUM) and Universitas Muhammadiyah Yogyakarta (UMY) after the MoU Phase.

I would also like to express my heartfelt thanks to Centre for Postgraduate Studies (CPS), Postgraduate Students Society (PGSS), contributors, paper presenters, participants and our Indonesian counterpart for making this program a prestigious event of the year.

This educational and cultural visit is not only an avenue to foster good relationship between organizations and individuals and to learn as much from one another but a step forward in promoting quality graduates who practices their ability outdoor and master his or her studies through first hand experience. The Islamic platform inculcated throughout the educational system namely the Islamization of knowledge, both theoretical and practical, will add value to our graduates. This comprehensive excellent we strived for must always be encouraged through conferences, seminars and intellectual-based activities in line with our lullaby: The journey of a thousand miles begin by a single step, the vision of centuries ahead must start from now.

My utmost support is with you always. Looking forward to a fruitful meeting.

Ma'assalamah Wassalamu'alaikum Wr, Wb.

Prof. Dato' Dr. Syed Arabi Idid Rector, IIUM

# MESSAGE FROM EDUCATION AND CULTURAL ATTACHE EMBASSY OF THE REPUBLIC OF INDONESIA KUALA LUMPUR

Assalamu'alaikum warahmatullahi wabarakatuh

All praise be to Allah SWT. This is the moment where implementation of MoU between Universitas Muhammadiyah Yogyakarta (UMY) and International Islamic University Malaysia (IIUM) comes in the form of action by organizing this Joint Seminar. The efforts of both sides to implement the MoU are highly appreciated, especially, in the context of which both universities effort to enhance the quality of education.

Substantially, I believe that this Joint Seminar will bring many benefits. In term of the development of knowledge, it is a means for developing academic quality, for exchanging of information on academic development, as well as for constructing intellectual atmosphere at both universities. In term of international relations, both universities have taken part in increasing close relationship between Malaysia and Indonesia. RUM and UNIY as well are using 'soft power' to increase bilateral relations among citizens which brings a lot of benefits for both nations.

Therefore, I hope that both RUM and UMY can make use of this program as a 'kick-off' for other programs in the future, especially in using UMY's vast networks with other Muhammadivah Universities in various cities in Indonesia as well as IIUM's network. The support of IIUM for UMY also means a progress for IIUM and UMY. I hope such joint program will continue in future for betterment of both Indonesia and Malaysia. Embassy of the Republic of Indonesia in Kuala Lumpur will always support these efforts.

To our honorable guests, Rector, Dean of Postgraduate Studies (CPS), Dean of ISTAC, Dean of IRKHS, Deputy Deans and Head Departments from various Kulliyah, lecturers and students of IIUM, I warmly welcome you to Yogyakarta. I hope you enjoy your stay in the cultural city of Yogyakarta.

Finally, as the Attache of Education and Cultural, Embassy of the Republic of Indonesia, Kuala Lumpur, I sincerely wish you good luck and a successful program with unforgettable memories.

Wabillahit Taufiq Wal Hidayah Wassalamu'alaikum warahmatullahi wabarakatuh.

# M.Imran Hanafi

# MESSAGE FROM DEAN CENTRE FOR POSTGRADUATE STUDIES

Assalamu'alaikum warahmatullahi wabarakatuh

Praise be to Allah. May the peace and blessings of Allah be on the last prophet and messenger, our master Muhammad and on his household and companions. It is a great privilege for me to foreword this message to this wonderful event that is jointly organized by the Universitas Muhammadiyah Yogyakarta (UMY) and International Islamic University (IIUM).

First and foremost I would like to record my special gratitude to management of Universitas Muhammadiyah Yogyakarta for their co-operation.

In order to obtain comprehensive excellence, the Centre for Postgraduate studies has always facilitates postgraduate students of the university to achieve the highest quality in their academic work. This seminar is one of the many programs that Centre for postgraduate studies has to ensure quality graduates.

I would therefore like to thank all the participants and programme coordinators who have worked hard to realize this event.

May Allah SWT shower His blessing upon us.

Wassalamu'alaikum Wr, Wb.

Prof. Dato' Dr. Wan Rafaei Abdul Rahman

Dean, Centre For Postgraduate Studies

# MESSAGE FROM THE ACTIN PRESIDENT OF POSTGRADUATE STUDE

# Assalamu'alaikum warahmatullahi wabarakatuh

On behalf of Postgraduate Students' Society (PGSS), my gratitude and appreciation to our beloved Dean of Studies, the Embassy of Indonesia in Kuala Muhammadiyah Yogyakarta and the organizing com IIUM and the Universitas Muhammadiyah Yogyakarta huge success. Postgraduate Students' Society (PGSS) u supervision of the Center for Postgraduate Studies (CPS this event.

As I strongly believe that the initial stages of unity ar and building the new generation, who will represent the more, such programs, not only achieve the mission universities but to achieve the global mission and Therefore, I believe today, we have to have understart and then only we can appreciate our diverse cultuacknowledge the different strengths posses in us an weaknesses through knowledge in this age of informations sure this joint seminar will initiate unity among the futualong with integrating them.

Thank you,

# Mohd Nabi Habibi

Action Duran dout Destaura durate Studental Society (DCS)

# MESSAGE FROM PROGRAM DIRECTOR

Assalamu'alaikum warahmatullahi wabarakatuh.

Praise be to Allah. May the peace and blessings of Allah be on the last Prophet and Messenger, our master Muhammad and on his household and companions.

Honestly speaking, we are pleased to be trusted by Postgraduate Students' Society (PGSS) and Centre for Postgraduate Studies (CPS) to organize the programme named Educational and Cultural Visit to Yogyakarta, Indonesia. For this, We express our gratitude to the management of both PGSS and CPS. This programme is of immense value. It has the potentials to promote intellectual endeavor, develop leadership capabilities and enrich cross-cultural understandings. We sincerely believe and hope that program of this kind will be organized in a regular fashion in future.

It is a great privilege for us to play twofold role in organizing this event: as a host and as guest. In fact, this is a fascinating experience to manage this event. Since our inception here, we have found meaningful interaction of students in an interweaving of cultures into complicated, yet beautiful, embroidery of social fabric. We are proud to say that this dearly loved university has produced graduates of high quality, who are distinct from those of the local universities.

Finally, we wish to express our special thanks to Bapak M.Imran Hanafi, Education and Cultural Attache of Indonesian Embassy, Bapak Herdaus, S.H., Assistant of Immigration Attache of Indonesian Embassy, Bapak Tharian Taharuddin for their immensely valuable assistance and co-operation in making this program a success. I sincerely appreciate all local committees at Yogyakarta, the colleagues and program coordinators and committee members who worked diligently to materialize this event. We wish to pass on good wishes to the PGSS for their valuable efforts it expended for this event.

May Allah s.w.t shower His blessing upon us.

Wassalam,

### Nasrullah

Programme Director

### Todi Kurniawan

Co-Programme Director

# **Contents**

# SCIENCES, TECHNOLOGY AND EDUCATION HUMAN RESOURCES DEVELOPMENT ISSUES

Surface Waves Technology in Civil Engineering Applications Sri Atmaja P. Rosyidi	1-13
Development of Earthquake Disaster Management System in Bantul: Study on Housing and Infrastructures Damages for Their Reconstruction	
Sri Atmaja P. Rosyidi, Surya Budi Lesmana, Chu-Chieh Jay Lin	14-25
Cardiovascular Reactivity in Normotensive Young Adults with Family History of Hyoertension.	
Noriah M. Noor, Ikhlas M. Jenie, Tariq A. Razak	26-37
Prevention of Hiv/Aids in Malaysia in The Light of Qur'énic Solutions: The Role of Irk Students of	
International Islamic University Malaysia Asmawati Muhamad, Israr Ahmad Khan	38-54
Fluorescence Detection of Human Premalignant and Malignant Lesions	
Torla Hasan	55-70
The Roles of Urban Architectural Landscape on Shallow Groundwater, Case Study Jakarta Indonesia	
Muhammad Koeswadi	71-83
The Islamicization of Architecture and Environmental Design Education: Case Study of Kulliyyah of Architecture and Environmental Design (Kaed),	
International Islamic University Malaysia Mansor Ibrahim, Maheran Yaman	84-97
Moringa Oleifera Seeds for Use in Water Treatment Eman N. Ali, Suleyman A. Muyibi, Hamzah M. Salleh	98-103

# ECONOMICS AND DEVELOPMENT ISSUES

The Role and Pitfalls of E-Government in Indonesia Punang Amaripuja	115-126
Market Integration and Dynamic Linkages Between Shariah-Compliance Stocks and Interest Rate: Empirical Evidence on The Kuala Lumpur Syariah Index (Klsi) Malaysia Muchamad Imam Bintoro	127-134
The Emerging Issues on The Objectives and Characteristics if Islamic Accounting for Islamic Business Organizations and Its Impact in Indonesia Islamic Accounting Development Rizal Yaya	
Relationship Between Organizational Justice in Performance Appraisal Context and Outcomes; Study on Islamic University in Yogyakarta	135-150
Heru Kurnianto Tjahjono	151-164
Making The Development More Sustainable and The Role of Women in Islam	
Masyhudi Muqorobin	165-185
The Analysis of Exchange Rate Fluctuations and Its Implications on Indonesian Economy Empirical Evidence and Islamic Economic Perspective	
Imamudin Yuliadi	186-202
Value for Money: For The Nigerian Construction Clients Olanrewaju Abdul Lateef, Kharuddin Bdul Rashid	203-215
Environment Related Trade Barriers (Etbs): The Impact on Muslim Countries	
Noor Aini Bt. Zakaria, Rokiah Alavi	216-225
Toward An Ideal Balance of Islamic Banking Products Portfolio The Case of Sharia Bank Industry in Indonesia Muhammad Akhyar Adnan	226 226
миниттии Акпуит Липип	226-236
On The Unique Mindset of A Muslim Business Entrepreneur: A Micro Developmental View Sahri Orman, Aby Saim Md. Shahabyddia	127 1EE
STEET FEMALE AND SAIM BAA SUAMAMAAN	7 2:1 '76.6

Inter-Regional Economic Cooperation Among The Oic Member States: Iternative Solution Towards Poverty Alleviation Muhammad Ghali Ahmed	256-263
The Impact of Rising Oil Prices on The Malaysian and Indonesian Economy Mohd Edil Abd. Sukor	264-277
Ways to Improve Economic Growth in The Third World Nation: Nigeria Sherif Abdul Raheem Ajiteru, El-Fatih Abdel Salam	278-292
Synthesising A Corporate Paradox, Profit Maximisation Versus Social Responsibility: Based on The Quran Siti Maimon Haji Kamso	293-305
POLITICS AND LEGAL ENFORCEMENT ISSUES	
Legal Analysis on The Concept and The Practice of Impeachment A Comparative Study Between Abdurrahman Wahid Case and William Jefferson Clinton Case Iwan Satriawan	307-339
Perda Syariah' V.S. Constitution: The Study of The Implementation of Perda Syariah (Sharia Byelaw) in Indonesia M. Endriyo Susila, Yordan Gunawan	340-349
State and Islamic Human Development (A Political Perspective)  Tulus Warsito	350-365
The Perplexed Issues of Morality and Law: The Case of Ooi Kean Thong Mohd Iqbal Bin Abdul Wahab, Ahmad Ibrahim	366-375
The Ruling on Refusal to Take An Oath in Islamic Jurisprudence and Its Application in The Sharī Ah Courts in Malaysia and Philippines Radruddin Paguimanan Ahmad, Arif Ali Arif Fiqh, Usul Al-Fiqh	376-396
Constraints and Political Developments in Afghanistan, 2001-2 A Critical Appraisal Mohd Nabi Habibi, El-Fateh Abdul Salam	006: 397-406
Why Does Islamization of Political Science Matter?  Ali Muhammad, Wahabuddin Ra'ees	407-413

The Struggle for Regional Dominance in The Horn of Africa; Its Historical Roots and Future Scenarios  Ahmed Omar Abdalleh@fahad, N.M. Yassin Ahmed Ibrahim	414-421
The New Roles The Muslim Plays in Competitive and Relatively Repressive International Relations.  Dr. Bambang Cipto	422-427
SOCIAL, RELIGIOUS AND CULTURAL ISSUES	
An Instrument to Measure Work Values Among Malaysian Workers	
Wan Rafaei Abdul Rahman, Che Su Binti Mustaffa	429-434
Islamic Education for All: An Overview of Approaches Taken Towards Systematizing Inclusive Islamic Education in Singapore	
Sharifah Thuraiya Su'ad Ahmad Alhabshi, Mohyani Razikin	435-442
Muslim Education in The Autonomous Region in Southern Philippines: Problems and Solutions  Jeehan Daisy Jane C. Orcullo, Ismaiel Hassanein Ahmed	443-448
The Role of Concordance in Education: A Case Study of The Meaning of If and Whether Suryanto	449-480
Poverty, Muslim Activism, and Social Welfare The Philanthropic Vision of Charitable Institutions in Indonesian Islam (The Case Study of Muhammadiyah)	401 402
Hilman Latief	481-492
Persuasive Communication in Preaching (Case Study Abdullah Gymnastiar and Ja'far Umar Thalib) Twediana Budi Hapsari, M.Si	493-505
School Cost Escalation: Critical Ideas for Financial Reform in Indonesia Nurwanto	506-515
Empowering The Ummah Through Non Governmental Organization: The Role of Muslim Intellectuals Ariff Bin Osman	516-522
Muslim Countries and Development "Barriers to Development: How to Address Illiteracy and Poverty in Comoro Islands"	

# Value For Money: For The Nigerian Construction Clients

Olanrewaju Abdul Lateef\*, Khairuddin Abdul Rashid
Department of Quantity Surveying, Kulliyyah of Architecture and Environmental
Design International Islamic University Malaysia

# Abstract

The Nigerian construction industry is plague with various prevailing problems, such as the problem of failing to achieve value for money for its clients. Construction clients in Nigeria are not achieving values in their constructed facilities in terms of time, cost, quality, safety, functions, maintenance and total satisfactions of their investment in the construction industry. This paper reports the findings of a study assessing the practice of value management in the Nigerian construction industry. It examines how VM could be applied in order to facilitate value for money in Nigeria. The methodology of the study combines library search, internet retrieval and primary data collected from those who are considered experts in cost management and value management in Nigeria. The findings suggest that value management (VM) could be applied in order to facilitate the achievement of value for the clients in Nigeria; however, it was revealed that the Nigerian construction professionals are not familiar with value management. The paper concluded by recommending the introduction of VM to the Nigerian construction industry as an effort to achieve value for money for its clients. The paper further recommends that the Nigerian quantity surveyors should broaden their scopes of knowledge to include VM methodology and to take the leading role in promoting it in Nigeria. Although this research is about Nigeria, other Muslims developing countries are also facing similar or same problems in procuring their buildings and other infrastructural facilities. Therefore the findings and the discussions in this paper could serves as references for the Muslims.

Keywords: Nigeria; value management; construction projects; client value system; quantity surveyors.

### Introduction

Client value system is the performance requirement that a project must conform to and it is contained in the client's business case. Clients use their value system to measure the success of their projects. The criteria of the value system include cost, time, quality, aesthetic, image, esteem and functional performances. Construction projects in Nigeria are characterized by low value addedness arising from high cost of construction, completion behind schedules and low quality performance (Ogunsemi and Aje 2006 and Elinwa and Joshua 2001). Literatures suggest that the major causes of projects over runs on cost and time and poor quality performance in Nigeria are issues relating to the concept and design stage. It is noted that the way projects are conceptualized, executed and operated in Nigeria are not holistic and multidisciplinary in nature.

<sup>\*</sup>Corresponding author: olanrewaju20002000@yahoo.com

There is no linkage between one stage and the next. Problems arising from concepts and designs could be mitigated strategically. From desk work study VM is capable of facilitating the achievement of value for money for the Nigerian clients by making explicit their value system at the concept stage of the projects. Making explicit the client's value system led to improvement of value for money invested. Unlike other methods of value delivery that are biased toward cost in most of the cases, VM integrate all the criteria of the value system in order to deliver complete value for the client money.

The study aims to ascertain the dominant criteria of the value system of the Nigerian clients and if value for money can be achieved using VM in Nigeria. The study also assesses the level of familiarity of the major players in the Nigerian construction industry toward VM and to identify the barriers toward its development. The study also argued that the project success factors or performance criteria of the Nigerian clients are the value systems of the Nigerian clients. This study is motivated by the perennial problems faced by the Nigeria construction industry in terms of achieving value for money for its clients and the known benefits of value management as an approach that is capable of facilitating the achievement of value as determined by the clients.

# Research Methodology

The methods used for collecting data for this study are library search, internet retrieval and questionnaire survey. The literatures review aimed at exploring the construction publications regarding the familiarity and practice of VM in the Nigerian construction industry and to explore the criteria of the value system of the Nigerian clients. Seventy - eight publications relating to Nigerian construction industry were reviewed (i.e journals, magazines, texts and research papers) that relate to the Nigerian construction industry published in Nigeria and elsewhere from 1995 to 2006 were examined. Some are refereed. The search aimed at identifying publications on VM by Nigerian authors. Nigerian authors here in denote that the author is residing in Nigeria. The author (s) of any of these publications that discussed VM is considered an expert of by VM in Nigeria.

E-mails were sent to professional bodies like the branch of the Royal Institution of Chartered Surveyors in Nigeria, Nigeria Institute of Quantity surveyors and Nigerian Society of Engineer eight months ago but they are yet to reply. The addresses of these professional bodies were accessed through the Internet. The questionnaire was conducted using electronic, telephone, and face to face discussions with those considered major players in the Nigerian construction industry. The face to face interviews were conducted on four Nigerians in Malaysia. One of respondents he is a quantity surveyor. He is a senior lecturer in one of the Nigerian universities. Two are doctoral students in two separate universities here in Malaysia. One is an architect and the second is a building engineer. The last is a master student in Malaysia. They all have many years of working experience in the Nigerian construction industry before furthering their studies. Their responses are considered representing the current situation in Nigeria as none of them has left Nigeria more than three years. The information for the case study was collected using electronic discussions from the facilitator of the VE programme. Sixty - five emails were sent to major players in the Nigerian

construction industry. But only 29 responded (representing 44.92%). The study commenced in November 2005 and end in October 2006. Though the size of the returns is small, but considering the familiarities of the respondents with the Nigerian construction industry, this is typical of the Nigerian construction industry.

# **Building and the Construction Sector of Nigeria**

The building and construction industry is one of the major industries in the Nigerian economy in terms of its contributions to the GDP (Soludo 2006). See table 1 below. In terms of its percentage share of the fixed capital investment, the Nigerian building and construction industry represents 70% (National construction policy 1991) quoted in Mogbo, (1999 p. 5.) In terms of growth rate the industry is among the active sectors of the economy (Soludo 2006). See table 2 below. The industry is providing direct employment to not less than 600,000 employees representing one percent of the total labour force in Nigeria (FOS 1998) in Faniran yr: anon). If the labour force of the allied industries is added, the total labour force could be amounted to a million or more. However, the scenario is not as glossy as it looks because the contributions of the industry to the GDP, as a sources of employments generations and growth rate has remain inconsistent and small compare to other developing countries. See Khairuddin (2002). His book comprehensively compared the contributions of the construction industries in various countries. The size of the contributions of the Nigerian construction industry to its economy suggest that the industry could serves as an impediment to its attainment of sustainable growth and development. This is because the outputs of the construction industry are capital goods and services. Capital goods are goods that stimulate growth in other sectors of the economy. Constructed facilities are part of any country's fundamental economic resources that serves as positive catalyst for positive changes. Without constructed facilities economies activities can not functions (Morton and Jaggar 1995), and neither would social activities strive.

Table 1: shows the contribution of the building and construction industry and

some selected industries to the Nigerian economy

	2000	2001	2002	2003	2004	2005
Agriculture	35.84	35.58	35. 86	34.63	40.99	41.49
Industry	36.98	37.3	34.67	38.16	29.48	27.72
Building & Construction	1.95	2.09	2.11	2.08	1.44	1.53
Whole sale & retail trade	13.11	12.85	13.22	12.68	12.9	13.74
Services	12.12	12.17	14.12	12.45	14.56	14.88
Total	100	100	100	100	100	100

Soludo (2006)

Table 2: showing the growth rate of the building and construction industry with

		iustries in	Trigona		
2000	2001	2002	2003	2004	2005
2.95	3.88	4.25	6.47	6.5	6.7
10.2	5.2	-3.8	21.4	4.1	-1.3
4	12	4.3	8.8	10	-5.2
1.6	2.5	6.5	5.8	9.7	39.9
	2000 2.95 10.2 4	2000     2001       2.95     3.88       10.2     5.2       4     12	2000         2001         2002           2.95         3.88         4.25           10.2         5.2         -3.8           4         12         4.3	2000         2001         2002         2003           2.95         3.88         4.25         6.47           10.2         5.2         -3.8         21.4           4         12         4.3         8.8	2000         2001         2002         2003         2004           2.95         3.88         4.25         6.47         6.5           10.2         5.2         -3.8         21.4         4.1           4         12         4.3         8.8         10

Soludo (2006)

In addition, construction projects in Nigeria are characterized with over runs on cost and time and poor quality and functional performance. Construction clients in Nigeria are not achieving values for their investment in terms of time, cost, functional quality, safety, maintenance and total satisfactions of their constructed facilities. A study conducted by Ogunsemi and Aje (2006)1, revealed that out of the 65 public projects executed from 1995 to 2006; 45 (69%) were cost over run, 52(80%) were completed behind scheduled and 49(75%) of the projects do not meet their specified quality performance. Their study further revealed that projects could be 400% completed behind schedules and 200% above the initial agreed budgets. In another study conducted by Elinwa and Joshua (2001)2, it was revealed that construction projects could be delayed for up to 450%. Corroborating this view, studies conducted by Amu, Adeoye and. Faluyi, (20050, Elinwa and Joshua (2001 p423) and Ogunsemi and Aje (2006) also revealed that more than 70% of construction projects executed in Nigeria over runs on cost and time. And Odeyinka and Yusif (1997) asserted that 7 out of every 10 projects executed in Nigeria were completed behind scheduled (Aibuni and Jagboro 2002). This is in addition to buffering the contract sum with the usual 5% contingency sum prior to the commencement of the projects (Aibuni and Jagboro 2002). Disputes, litigations and abandonment are the fall out of these prevailing problems. Clearly what is happening in the Nigerian construction is not the best practice because at end of the day, the clients could not occupy their projects as desired and where they do, that could be probably at exorbitant price.

The client value system is the critical criteria that the project must conform to. The value system is a clear unambiguous statement of what the client will accept of his investment in the project. The value system of the client in a project is contingent upon the nature of the clients, the purpose of the facilities and the types of facilities. It varied from client to client and from projects to projects. Client could demand for value for money for his project in a number of ways (Laing 2006) cited in Cartlidge (2006). Some clients may require facilities designed and constructed within a short period of time despite the high construction cost. To such client, time is of most critical criterion in the value system. Some client could prefer cost of the facilities be lower as against time and quality. Yet in some case quality could be critical as compare to cost and time.

This study was conducted in southern Nigeria

<sup>&</sup>lt;sup>2</sup> This study is conducted in northern Nigeria

The criteria of the value system included cost, time, images, aesthetic, functional, maintainability, and quality. The criteria of the project to the client in the value system upon establishment are used to examine all other decisions to be taken pertaining to the projects (Kelly and Male 2001). However, achieving value in the projects might not in any way be the cheapest alternative. Value from the client's perspective is closely related to the client's other requirements in the constructed facility. Achieving value entails the integration of the criteria in client value system.

In Nigeria however, the criteria of cost, time, quality, function, and aesthetic are described as the project success factors (see Ogunsemi and Aje 2006) and as performance criteria (see Odusami 2003; Aje 2006; Lukumon and Kwok 2005). Construction clients in Nigeria used these factors to measure the success and satisfaction of their investment in their constructed facilities (Lukumon and Kwok 2005) quoted in Ogunsemi 2006). These are critical to the success of their projects. Their projects are successful if these are certified (Ogunsemi and Aje 2006 and Odusami 2003).

This paper, argued that these criteria that the Nigerian construction clients want their projects to conform to are the criteria of their value systems. This is because the clients in Nigeria used these criteria to measure value for their money in the built assets (Ogunsemi and Aje 2006). However, based on the existing literature on the Nigerian construction industry and based on preliminary investigations conducted at the outset of this study, these criteria are not described as the criteria of their value system. But based on the priority that the Nigerian clients attached to these criteria and in the context of value management, these are the criteria of their value systems.

In order to ensure that constructed facilities are completed within budget and on schedules without compromising the required quality and functional criteria of the clients in Nigeria. Researchers have proposed different approaches. For instance, Ogunsemi and Aje (2006) and Ogunsemi (2006) proposed the prequalifications of contractors. Lukumon and Kwok (2005) and Adejimi (2005) argued that the designers in Nigeria should improve on their designs functions. Their studies suggest that clients in Nigeria are not receiving what they needs from the competency of the designers. Adam (1997) also proposed that the indigenous contractors should acquire more skills for effective site management.

However, it is argue that these proposals are not efficient. For instance pre – qualifications of the contractors alone can not facilitate the achievement of value for money. Pre - qualification is done after major decisions have been taken and usually after designs and specifications are completed. And another question is what happens to the project after the contract had been awarded? Because contractors could maneuver their ways in order to be pre – qualified, without possessing the require expertise necessary to complete the works. This is recurrent phenomenon in Nigeria. Things could also go wrong at the concept stage of the projects. The client's criteria could be mismatched. Regardless of the competencies of the contractors, these problems will persist if there is value mismatched at the concept. The competency of the consultants and the contractors (i.e. designers) alone could not assure the achievement of value for money if other activities that are critical to the project are not well coordinated. However, it is acknowledged, that these proposals could contribute to the satisfactorily

completion of the projects. What is been contended is the extent of their contributions as separate item. These approaches are fragmented, bias and unrealistic. What is required is holistic approach. There is greater need for the consideration of projects from concept through to completion and occupancy.

Therefore, in order to provide holistic approach that will integrate the contractors, the consultants, the clients and all other stakeholders toward achieving improve value for money for the clients in Nigeria, this research propose the applications of value management. Because achieving value for money in a construction project require the commitment, understanding ad cooperation of the stakeholders in the constructed facility to the play their active parts.

Value management has the capability for facilitating the achievement of value for money for the clients (see Steven, 1997; Mazlan, 2002; Fong, 1999; Shen and Liu, 2002; Green, 1990; Ashworth, 2004; Male and Kelly, 2001; Dell'Isola, 1982; Hira and Michael, 1983). VM maximizes the clients' satisfactions through participation (Leung, 2001). Value management is "a services which maximizes the functional value of a projects by managing its development from concept to completion and commissioning through the audit of all decisions against the value system determined by the client" (Kelly and Male 2001), rather than been fragmented. It strikes the balance between clients' requirements in relations to the projects objectives for the attainments of value for money invested (Best and De Valence 2002). It makes use of problems solving techniques like functional analysis to make explicit the criteria of the client's value system and further for integrating them for value creation. Other techniques and tools commonly use in VM include stakeholder analysis, projects driver analysis, risk analysis, SWOT analysis, scheduling, supply chain analysis, life cycle cost analysis, time / cost / quality analysis and brainstorming.

# VM approach toward facilitating the achievement of value for money for the Nigerian clients

The Nigerian construction clients commonly measure the success of their investments in projects in terms of costs of construction (Lukumon and Kwok 2005, Ogunsemi and Aje). In Nigeria, the causes of high costs of construction includes variations, complicated designs, poor briefs, competencies of the contractor and consultants, delay, shortages of material and labour (Aniekwu 2001, Elinwa and Joshua 1999, Mansfield and Ugwu 1994; Amu, Adeoye and. Faluyi, 2005). These factors that cause high cost in Nigeria are designs and construction related, which can be strategically addressed. However, in order to provide value to the Nigerian clients, emphasis should be placed on the integration of the criteria of the value system. Because placing emphasis on only one of the criteria in the value system is not the best practices. This is a bias toward just a criterion in the criteria of the value system. There is a requirement to consider the projects from the concept and in terms of total life span of the projects if value for money is to be achieved to the client. By considering projects in terms of it life span, enable design decisions to be taken not only in terms of cost alone.

VM challenges designers' and clients' decisions and requirements (Hira and Michael 1983). VM ensures that the money earmarked for projects is spent judiciously on what the clients needs rather than what the designs team thought the client wants (Marsh 2003). This is achieved by defining the functional requirement of the projects and its components. Central to VM is the functional requirement of the projects. This is because by providing more than what the clients require is a waste of time and resources and providing less is unacceptable because this does not add value to the clients' money (Fisk, 2004). The client's value system must be the driving force of the consultants. Therefore, the clients must be allowed to determine their value system in relation to the project. The client value system might not be known if VM is not introduced before design is committed. This is because the traditional briefing process is reiterative in nature that the modern procurement systems could not accommodate. Because it wastes a lot of time and other resources in an attempt to determined the client value system (Kelly and Male 2001). A successful project to the clients is that completed within budgets, on schedules and the project should remain useful throughout it-anticipated life span.

# Investigating the level of familiarity and the practice of VM among the construction professionals in Nigeria

The tables' below shows the feedbacks from the questionnaire in order to meet the objective of the practice and familiarity of VM in Nigeria; respondents were conveniently selected for the study, because the database containing the names and addresses of the major players are not available. Discussions with experts suggest that it is very unlikely if such databases are in existence. Tables 3 and 4 provide the background of these professionals. Tables 5 to 7 show the arrays of questions and their corresponding responses.

Table 3: showing background of the respondents

	players	No.	%	Registered with professional body			
				Yes	No	Email	Face to face
1	QS	19	66	12	7	18	1
2	Architect	6	20	4	2	5	1
3	Engineer	4	14	2	2	2	2
	Total	29	100	18	11	25	4

Table 4: showing the years of working or / teaching experiences of the respondents

Professionals	Less or equal to five years	More then five but less or equal to ten years	More than ten but less fifteen	Not none	Total
Quantity surveyors	6	5	4	4	19
Architects	0	2	4	0	6
Engineers	0_	2	2	0	6
Total	6	9	10	4	29

Table 5: How familiar are you with the value management techniques?

	Res	ponse
Professional	Not at all	Familiar
Architect	4	2
QS	11	8
Engineer	4	0
Total	19	10

Table 6: Have you ever participate in the value management workshop?

	Resp	onse
Professional	No	Yes
Architect	6	0
QS	18	1
Engineer	4	0
Total	28	1

Table 7: You participate as what?

	Response					
Professional	Client	Design team	Contractor	Facilitators		
Architect	0	0	0	0		
QS	0	0	0	1		
Engineer	0	0	0	0		
Total	0	0	0	1		

# Case study

The data obtained from the respondent indicated that the services that were rendered are VE. The programme is carry out under the name VE, there is no mention of VM in their documents. In fact their there is no mention of "workshop", in their documents instead they use meeting. It is an ongoing project and the VE programme was conducted toward the end of last year. It is a sport city located in one of Nigeria's major state. For reasons of confidentiality, the identifications of the parties to the programme are concealed. The exact location of the project will not be disclosed. But all other information presented is factual. The main purpose of the case study is to demonstrate the purpose of applying VE in Nigeria and to investigate other salient issues such as the nature of the procedure.

The VE programme make use of the traditional VE stages; of information phase, functional phase, creative and speculative phase, evaluation and development phase, and recommendation phase. The following techniques were used during the workshop: Pareto rule, Functional Analysis System Technique (FAST), elemental cost, and cost worth for their assignment. According to the team's recommendations the saving of N 299,855,830.45 (Equivalent to US\$ 221, 154.30 at 135 exchange rates), will be made if their recommendations are implemented. This amount represents 8.37% of the original contract sum.

# **Analysis of Results**

Based on the criteria set here in, there are VM experts in Nigeria, for instance, Oladapo (2001) and Uche (1999). Construction clients in Nigeria placed greater priority on cost of their constructed facilities. All together twenty-nine professionals comprising, nineteen quantity surveyors, six architects and four engineers respond to the questions. Some of them are senior lecturers in the high institutions of learning in Nigeria. All the lecturers that participated have their private consulting practices.

Eight out of the nineteen quantity surveyors involved in the study are familiar with VM and two of the six architects are familiar with VM, but none of the four engineers are familiar with the VM. None except one of the quantity surveyors has participated in a VM workshop; all the other respondents do not have empirical knowledge of the VM. During the discussions it was revealed that the quantity surveyors in Nigeria believe they are providing the VM service as part of their cost management programme.

# Discussion of Results

Although there is value managements experts in Nigeria based on the bases of the criteria set. But it is not known whether these experts practice VM in Nigeria or not. Nevertheless, two out of the total numbers of seventy eight is very small (i.e. 2.56%). The discussions by these experts on the practice of VM are not empirical to the Nigerian construction industry. It is only an outline summary of VM as a techniques. Uche (1999) only identity VM as an approach the quantity surveyors

need to improve in their delivery service and Oladapo (2001), describe VM as a cost management tool that could be used to reduce construction cost of low costs houses. In any case none of these authors write specifically on VM and its relation to Nigeria, but only includes it as parts of the literatures to their papers.

Only ten out of the twenty nine respondents are familiar with VM in Nigeria. Eight out of the nineteen quantity surveyors are familiar with VM. However, only one of them has attended VE workshop. The rest learnt about it from foreign publications. This indicates that the others do not practice VM in empirical sense of it applications. This suggest it low level of recognitions among the Nigerian professionals. The expert that claimed empirical knowledge of the VE programme participated in VE programme as facilitator. The programme was introduced after the designs have been completed and is very unlikely that the facilitator is trained as a VM facilitator and neither do the other team experienced in value management process and procedure. For the programme to have been introduced after the designs have been completed suggest, it is probably because the cost of the projects has over run. But this is not strange as one of the reasons that trigger the application of VM is when the estimated budget exceeded the anticipated budget. In this case improved value for money could not be achieved. The only criterion that could probably be achieved is cost reduction. It is not a coincidence that in this VE programme under study the recommendations are merely substitution, deletions and additions of the items of works

These types of services are not necessarily VM. This is cost management services (Kelly and Male (2001 p72), or better still the traditional value engineering services. Cost management does not make any huge alteration to the project concepts and also references are not made to the clients' value system (Kelly and Male 2001 p 72), and in fact same to the traditional value engineering process. For VM to be proactive it must be introduced at the concept stage before any design any committed and the workshop must be attended by all stakeholders. The VM workshop is different from the usually projects meetings. Central to the VM workshop is problem solving.

This study revealed that quantity surveyors in Nigeria are the obstacles to the promotion of the services of VM. Because many among those contacted could not clearly distinguish it essence from other cost reduction programme. Some of them thought they are providing the services to their clients as part of their cost reduction programme. Oladapo (2001) also described VM as a tool in cost management programme. For the quantity surveyors in Nigeria to think that they are providing the VM services to their clients as parts of the cost management services is unfortunate. This perception could serves as obstacle to the promotion and development of the VM Nigeria. This is because consultants are bias toward there area of specialization and level of experience (Marsh 2003). Reducing cost of projects is a by product of the value management programme, the major purpose of the VM is to ensure the attainment of value for money. The traditional quantity surveying cost reductions programme is carried out without given due important to the functional requirements of the constructed facilities (Willis, Ashworth and Willis 2002 p134). Cost management services are reactive whereas VM is proactive approach (Seeley 1996, Marsh 2003). The traditional method of delivery value to the clients by the quantity surveyors is based on the principle of cutting cost of the elements in order for the projects to remain within client's

budget – cost reconciliation. Instead VM develop alternative proposal that could meet the clients functional and quality requirements at less cost. VM provide powerful mechanisms to improve support and consolidate the traditional quantity surveying services in total value creation to the clients.

The few among the experts contaccted during the study that could distinguish VM from the traditional quantity surveying feel the clients will not want to incur additional cost for the services of the VM. This perception is not however limited to Nigeria, even elsewhere some clients have the same believe of not wanting to pay for the charge of the VM services. Therefore the clients in Nigeria are to be educated on differences and the benefits of VM from the concept.

### Conclusion

This paper has introduced the practice of VM in the Nigeria construction industry. The paper has been able to identify through literature review that the dominant criteria of the client value system in the Nigerian construction industry are cost, time and quality, but the clients attached greater concern to cost of the projects. They want their projects at less cost or they will not want to pay more even it is to comprise other criteria in the value system. Compromising other criteria at the expenses of cost is not VM programme. This could not deliver value for money because best value is not the same as lowest cost. Based, on the study VM could be introduced to facilitate the achievement of value for money for the clients in Nigeria. Construction consultants in Nigeria are not familiar with the VM techniques and procedures. Most experts that claimed its knowledge only read about it from foreign publications and they have wrong perception of the VM methodology. This suggests the shortage of VM experts in Nigeria. What is practice in Nigeria at the moments that the experts refer to as VM is a cost management services. The prime purpose of the VE intervention in Nigeria is for cost reduction. The study also revealed that majority of the experts' that claimed the knowledge of the techniques are quantity surveyors. However, the quantity surveyors in Nigeria are not promoting the applications of VM, whereas this ought to be their task. VM seek to redefine the traditional quantity surveying services and provided opportunities for them in other areas of projects management.

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