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CONCEPTUAL FRAMEWORK ON FACTORS THAT CONSTRAIN REAL ESTATE PROJECTS IMPLEMENTATION SUCCESS IN SOUTH EAST NIGERIA.

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ABSTRACT

This work conceptual framework on factors that constrain real estate projects implementation success deals more on theoretical review of factors which affects real estate project implementation success, while real estate projects has continued to fail, either through abandonment or via collapse, it has been observed that several efforts has been made by professionals especially within the built environment aimed at identifying those factors as well to contain the menace, but this seems not have yielded the expected results. The study reviewed major literatures and empirical studies on the subject matter and identified key areas which were not covered by other researchers and proposed comprehensive conceptual framework of the factors, it is expected that when professionals in the built environment take the identified factors which affects real estate projects implementation seriously, cases of failure will be reduced to barest minimum if not eradicated.

Keywords: Conceptual framework, Real estate projects, Constrain, Success.

1. INTRODUCTION

Real estate industry is one of the pillar industries in Nigerian economy. Its strategic importance in the nation's economic development cannot be underestimated. Real estate is like a catalyst that not only serve as an engine that energises every other sector of the economy but gives impetus to development rating of the environment, (Nwachukwu, 2016). The real estate industry is already at the centre of rapid economic development and contributing immensely to the transformation of the built environment. (PricewaterhouseCoopers (PwC), 2014). Real estate industry has continued to attract capital and demonstrate its resilience as an investment asset class, (PwC, 2017). Investments in real estate have consistently shown immunity to the market volatile fluctuations, even in bleak period, real estate values have continued to appreciate.

According to Bhaskar, Deshmukh and Aradhana (2016), in many developing countries, major construction activities accounts for about 80% of the total capital assets, 10% of the GDP, and more than 50% of the wealth assets invested in fixed assets. More than 50% of asset of most nations is held in real estate (Brown and Matysiak, 2000). The Nigerian real estate sector is growing at a rate 8.7%, which is faster than the average GDP growth of 7.4%, (PwC, 2015). Even with the obvious contribution of real estate industry, it has continued to suffer setbacks hence failure to successfully implement most real estate projects has become a major concern to the stakeholders in the built environment. Despite attempts made to identify factors affecting real estate projects implementation success, the problems have persisted.

Several studies in the past have identified several factors which constrain real estate projects implementation success but the extent to which these factors affect implementation is not yet known especially from the point of view of professionals involved. Even some identified factors are not comprehensive enough; some researchers randomly pick and carry out researcher based on some of their identified factors as it suits their purpose. Also some of these researches has been followed by carefully highlighted recommendations on how to tackle those constraining factors, yet the problems have continued unabated thus raising a concern on the will by stakeholders to contain the challenge.

Also several factors have been identified which researchers suggested will aid stakeholder to successfully execute real estate projects, yet there still exist cases unsuccessful real estate projects in South East Nigeria.

1.1 Statement of the Problem

Failure to successfully implement most real estate projects has been a source of concern to the stakeholders especially the professionals in the built environment. This failure has continued to manifest in form of collapse or abandonment. Some studies have identified several factors which affect real estate projects implementation success but these identified factors are not comprehensive enough; some researchers randomly pick and carry out research based on some of the identified factors as it suits their purpose. Nzekwe, Oladejo and Emoh (2015), which noted that the real estate sector of Nigerian construction industry is dotted with too many cases of failed, abandoned or uncompleted projects. Nwachukwu and Emoh (2011), stated that the case of failure, abandonment and collapse of real estate projects is prominent especially in developing economies, incidentally the states under study falls under a nation that is categorised under a developing economy. Sadly too, there are still abandoned projects defacing the landscape and recurring cases of collapse of real estate projects in Anambra, Enugu, Imo, Abia and Ebonyi, this could be attributed to a number of factors, Zarina, Zawawi, Yusof and Aris (2014) and Mwai (2014), looked at it from view point human-related factors, project-related factors, project procedures, project management actions, environmental related issues/constraint, Ifediora (2015), Ifediora and Keke (2019), Malkani and Kambekar (2013) and Koirala (2012) looked at the factors from view of human resources management practices and related factors. It is believed that those identified factors are the reasons why real estate project failed in the time past and even now. To ensure that real estate projects are successfully executed, there is need to for a conceptual framework which will identify these factors and carry out comprehensive reviews of these factors in other capture all the views/opinions of the professionals within the real estate project industry.

1.2 Aim And Objectives Of The Study

The study aimed at identifying the factors which constrain real estate project implementation success with a view to suggesting or proposing a conceptual framework that will guide stakeholders especially the professionals in the built environment in their quest towards finding a lasting solution to issues of failure of real estate project within the study area. The objectives of the study are: to identify factors which constrain real estate project implementation success and to propose a conceptual framework of the factors that affects real estate projects implementation success.

2 LITERATURE/THEORETICAL CONCEPTS

Real estate is a distinct subject, and because of its peculiar nature, it has spawned complex legal theories and very distinctive fact situations and has remained a captivating topic for centuries, (Jacobus, 2006). It is land and improvement made to the land and rights to use them, (p.13). Real estate is solely the land and its parts-landscapes, timber, water-ways, roads, fences, structures, utilities and all other permanently attached improvements and structures, (Institute of Real Estate Management, IREM, 2011). Real estate accounts for substantial share of gross national product, the social impact that real estate has upon the economy of an area is immense, it has direct impact on the economy, community and society, (Geschwender, 2015). Real estate as an investment has typically been a steady and appreciating means of increasing ones initial investment over time, it is a tangible investment that has the ability to change and adopt to future trend, (IREM, 2011). Several research works has been revealing reasons behind the failure of project. According to Grefen, Pernici and Sánchez, (2012), the major indicators regarding the failure of project are defined by the lack in internal efficiency and external effectiveness. Saxena, (2016) opined that the extent of failure is not depending on only one reason rather it is a collection of inefficiency in work with individual contribution.

Project failure has become a recurrent feature of construction projects in developing countries as revealed by research works, (Nzekwe, *et al.* 2015). The Nigerian construction project industry in particular is dotted with too many cases of failed, abandoned or uncompleted projects; these include both publicly-owned facilities and private projects, (p.2). Scholars have noted that a project failure is illustrated by a failure to achieve the four success criteria and is manifested by the lack of proven project management techniques.

2.2 Review Of Related Literature/Empirical Studies

This section captures work done by scholars in relation to construction industry both globally and locally. Zarina, Zawawi, Yusof and Aris (2014), was more on critical success factors (CSFs) which are project management action, project procedures human issues and external factors, the work was more theoretical in approach and no empirical data to back up the study. The work by Mwai (2014) was specifically on four factors that have a great influence on the successful completion of property development projects. These factors cannot be said to be comprehensive enough. In the research carried out by (Yiman, 2011), emphasis was on project management maturity in the construction industry of developing countries with focus on Ethiopian contractors. It specifically compared that of road contractors PM maturity to that of Building contractors. Hence it's not about factors affecting real estate project implementation success. Nagamany (2016) focused on causes and effects of abandoned projects in Malaysia and which it succeeded in finding out causes peculiar to the Malaysia residential sectors. Damoah, (2015) was specifically on investigation into causes and effects of project failure in Ghana; the extent was considered but differs from one criterion used to another. It was majorly on project in entirety, not specific about the type of project. Oyabanji, Liyanage and Akintoye (2017), concentrated of study of critical success factors in England, the study was empirical in nature as it used ranking to determine the criticality level of the identified factors, Satankarand Jain, (2015), also focused on success factors for real estate construction project and was based in India, it identified variables and grouped them into four, which is majorly on factors contributing to project success, so has not addressed the issues which this work intends to study. Ofori, (2013) was done in Ghana and was more of project management practices and projects generally this is however different from what this study tends to do. Ribeiro, Paiva, Varajão, and Dominguez (2013), focused generally on construction industry in Portuguese, it was not specific about real estate and factors studied is believed to be peculiar to Portuguese whereas Koirala, (2012) work was on risk in housing and real estate in Nepal. It deals more on risk management and how to mitigate them.

While Udomiaye, Ntaji and Unyime, (2018) was on causes of building collapse, it emphasis was more on religious center. Essien and Ajayi (2017), identified a number of major causes of building collapse and it employed empirical data in their analysis. Onyali, (2017) study was on real estate but specifically on correlates of project success, it concentrated the study on how comprehension, motivation, skills, resources and communication can predict success in Nigerian real estate construction sector. For Ogunde, Olaolu, Afolabi, Owolabi, and Ojelabi, (2017), even though it was empirical in approach was more on examining challenges confronting project management, it was not specific about the type of construction project. It also identified challenges affecting Project management. The research by Tijani and Ajagbe (2016) was specifically on professional view on the causes and effect of construction project abandonment in Ibadan; again it was not specific about the type of construction project and the extent to which the causes identified were not known. In separate studies by Nzekwe, Oladejo and Emoh (2015), they identified factors for project failure and the second study was that of assessment of factors responsible for successful project implementation in Anambra State, both studies were not specific about the type of project. For Okoye, Ngwu, and Ugochukwu (2015), their paper addressed the issues of management challenges facing construction practice in Nigeria was not specific about the nature or type of construction projects even when it identified the management challenges. Ihuah, Kakulu and Eaton (2014) research was majorly on critical project management success factors on sustainable housing and analysis were mainly based on documentary evidence according to the research, they suggested further empirical investigation which means the study is purely theoretical and was not about developing conceptual framework which this work was dedicated to.

In study by Alamu and Gana (2014), they attributed the rising incidents of building collapse to a number of factors. The study identified a number of collapsed project and possible causes. Kamau, Mireri, and Usman (2013) work was in Abuja and was specifically how life cycle systems influenced project performance; it was not about real estate projects and not in line with what this study tends to carry out. Ugonabo and Emoh, (2013), was done in Anambra State, in their study, they identified a multiplicity of factors inhibiting effective housing development and delivery and was not about conceptual framework. Ubani, Nwachukwu and Nwokonkwo (2010) was more on variation of building plan and its contribution to project failure, this is not the only factor that constrain real estate project implementation success, it also failed to look at issues on conceptual framework of factors that constrain real estate project success. Nwachukwu, (2010), concentrated on client constraining factors to construction project, client constraining factor is not the only factors, and his work did not consider other factors which this study seeks to explore. Chendo and Obi (2015), only examined the causes of building collapse in Nigeria and succeeded in enumerating specific areas the stakeholders in the building industry and the general public are affected. Ayeni and Adedeji (2015) concentrated on identification of factors that contribute to continuous occurrences of building collapse and were specifically about the role an Architect could play both in practice and in architectural education in mitigating building collapse hence it was only an Architects view. It failed to capture other professional's view. Gambo, Said and Ismail (2016), major focus was on assessing the relationship between major cost factors that affect technical performance of small size local government projects in Nigeria. Oyeyipo, Odusami, Ojelabi and Afolabi, (2016) was specific on issues relating to bidding and no bid decision and so was not about factors affecting real estate projects implementation success. Aje, Timo, and Nwaole (2016), focused only on the study to assess the perspectives of construction professionals on factors influencing tender prices of construction works and the contribution of the factors to the success rate of

contractors and not about conceptual framework on factors which this current work proposed. Ujene,Idoro and Odesola(2013) was specifically to compare small and medium contractors’ perception of the methods of allocation, factors affecting project overhead costs and the effect of the types of project overhead costs on cost, time and quality of the projects did not address any issue relating to real estate projects implementation success. Olagunju, Aremu and Ogundele(2013), work appears more theoretical and lack empirical evidence to express or explain those causes of abandonment and even identified causes were not detailed enough and only touched aspect of collapse.

Siew (2014), Malkani and Kambekar (2013), Ihuah (2014), Rusdi (2013) and Ifediora (2015), deal on human resources management. Siew’s work focused mainly on HRM practices and did not consider other factors. Malkani and Kambekar (2013) was on management of human resources in construction industry, it focused on identifying different components of HRM in construction industry. It did not specify the aspect of construction industry it focused on. While Rusdi’s work was more on employee’s satisfaction in real estate business, the extent to which employees’ satisfaction affect implementation success is not known. The work by Ifediora (2015)even though was on real estate projects was in just one local government in Anambra State and was specifically on human resources management practices and this is only an aspect. Similarly the work by Ifediora and Keke (2019) was also on human resources management practices in real estate projects success; again it focuses in Anambra State alone.

While acknowledging that some of the researches concentrated on general construction projects and on international construction which identified some factors either leading to collapse or abandonment of construction project, all the identified factors may not apply to States in South East Nigeria, again some were not able to narrow it down to specific area of the construction industry like real estate, they focused on causes and effect of failure, abandonment and collapse. Some that focused on human resources management were specifically on general construction industry. Some done by Nigerian authors paid less attention to conceptual framework on factors that constrain real estate projects implementation success in South East States of Nigeria, hence this work was devoted to proposing a conceptual framework on factors constrain implementation success in the study area.

3. METHODOLOGY

To achieve the objectives of this study, this work focuses mainly on secondary information as it purely theoretical and concentrated more on review related literatures and empirical studies, thus a conceptual framework was developed. Emphasis was more issues regarding construction industry, with emphasis on real estate project management.

4. PROPOSED CONCEPTUAL FRAMEWORK AND DISCUSSIONS

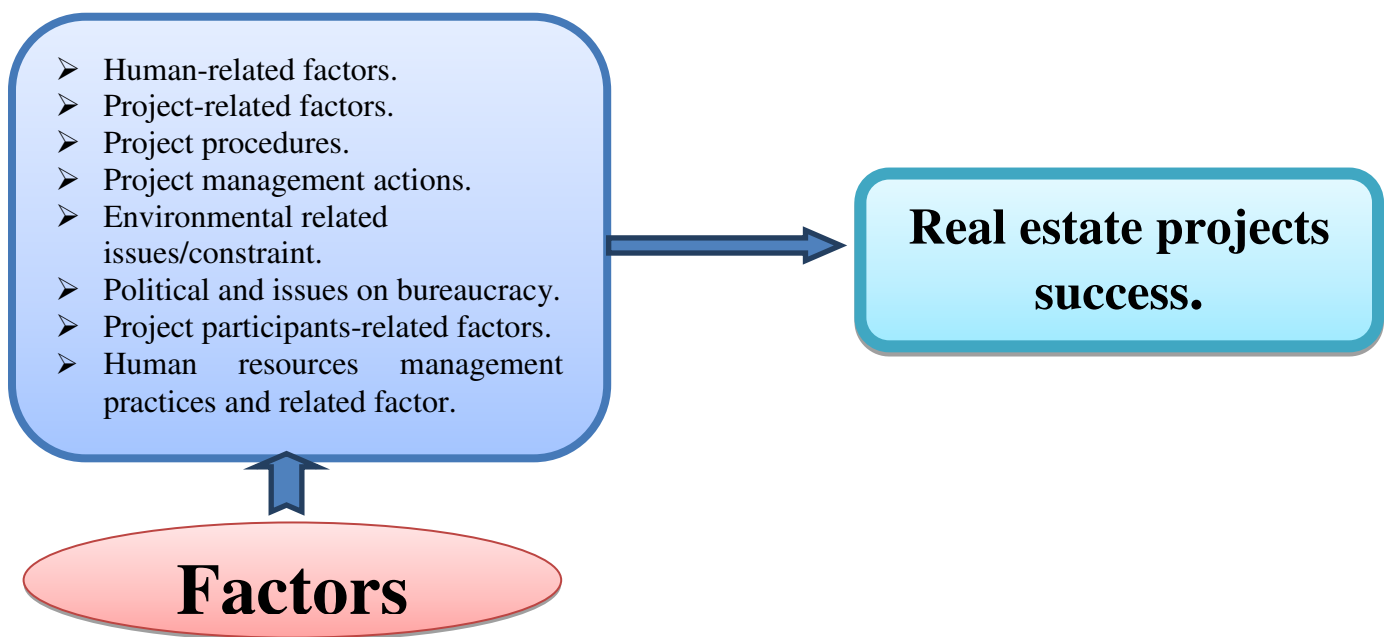


Fig. 1: Conceptual framework on factors that constrain real estate project implementation success

Evidences abound which shows a number of factors responsible for projects failures, most of these factors as identified by literatures and empirical studies are more on the construction industry generally. From the review of literatures many factors were identified even though some were not comprehensive enough. Efforts were made to carefully gather these factors to a specific group where each factor fits in properly. This gave rise to the conceptual framework as proposed in the figure above:

The above framework tried to group identified factors into the eight groups as indicated in the framework, each of the identified factors has variables and are briefly itemized below.

Human-related factors includes: Nature of clients' means of funding, clients' emphasis on high quality of construction at low construction cost, level of clients' experience, size of the clients' organization, clients' emphasis on quick construction and ability to brief, clients' decision making ability and definition of roles, clients' contribution to design and construction, management skill of the project team leaders which includes planning, organizing, coordinating, motivating and directing, project team leaders experience and commitment to meet success criterion, project team leaders' early and continued involvement in the project, project team leaders' working relationship with others, project team leaders' technical skill and adaptability to changes in the plan and youth harassment of developers.

Project-related factors includes: Type of real estate project, nature of such project, number of floors of the project, complexity of project, variation of project plan and size of project.

Project-related factors includes: Non adherence to procurement principle and procedures, Wrong and inability to strictly adhere to tendering rules and procedures.

Project management actions includes: Wrong application of good communication channels, faulty/wrong feedback mechanism, wrong application of control mechanisms, ineffective/wrong coordination process, effort devoted to planning, absence of or poor safety and quality assurance program, organization structure, control of subcontractors' works, the overall managerial actions and inefficient development control.

Environmental related issues/constraint includes: Economic environment and issue relation to economy in relation prices of building materials, social environment and matters relating to culture and tradition, political environment, physical environment and matters relating to geography and weather conditions, industrial relation environment, level of technology advanced, issues regarding internal and external environments.

Political and bureaucratic related issues include: The issue of bureaucracies in procurement process and many other matters concerning the progress of the projects, political interest in the said project.

Project participants-related factors includes: The type of client and his experience and construction sophistication, knowledge of construction project organization, project financing, client confidence in the construction team, well-defined scope, owner's risk aversion, design team experience, project design complexity, mistakes/delays in producing design documents, the level of contractor's experience, site management, contractor's cash flow, effectiveness of cost control system, speed of information flow, the skills and characteristics of project managers, the commitment, competence, and experience of the participants, team effort by all parties to a contract.

Human resources management practices and related factor includes: Wrong recruitment and selection practice, absence/poor supervision/inspections of workers involved in projects implementation, faulty or wrong way of appointment of contractors, faulty ways of handling procurement of materials, absence of motivation for actors involved in implementation, poor appraisal system and absence of compensation packages for deserving participants, faulty knowledge management system, poor employment relation and communication practices, faulty talent management and retention strategies, poor organization, design and development, absence of job satisfaction and security, absence/poor training, development and performance management/evaluation, poor or absence of human resource development programme, faulty or absence of reward management, absence of health, safety and welfare programmes and faulty employment practices.

These identified factors no doubt is comprehensive enough and has covered all issues and matters relating to factors affecting real estate implementation success and particularly important as actors in built environment now has a comprehensive knowledge of the factors that constrain real estate project implementation success. This knowledge will no doubt guide them in their undertakings and it's expected the stakeholders will take these factors very serious.

5. SUMMARY AND CONCLUSION

This work no doubt has covered extensively literatures both theoretical and empirical on major constraint factors, while some focuses on factors that cause abandonment others concentrated on collapse. Some also considered critical success factors while some dealt on human resources issues. The study reviewed major literatures and empirical studies on the subject major and identified key areas which were not covered by other researchers and proposed comprehensive conceptual framework of the factors, it is expected that when professionals in the built environment take notice of the identified factors, real estate projects implementation will be better managed and cases of failure will be reduced to barest minimum if not eradicated.

It should be noted that there is need for further research on subject matter with empirical evidence, this is needed in order to establish whether the identified factors actually constrain real estate project implementation success in the study area and the extent these factors affect real estate project implementation success.

References

- [1] Alamu, F. B. and Gana, M. S. 2014. An investigation on the causes of building collapse in Nigeria. *Journal of Environmental Sciences and Resources Management*, 6(1), 12-22. Retrieved June 25, 2018, from www.cenresinpub.org.
- [2] Aje, I. O., Timo, O. O., and Nwaole, A. N. C. 2016. Factors influencing success rate of contractors in competitive bidding for construction works in South-East, Nigeria. *Journal of Construction in Developing Countries*, 21(1), 19–34. <http://dx.doi.org/10.21315/jcdc2016.21.1.2>
- [3] Ayeni, D. A., and Adedeji, Y. M. D. 2015. Strategies for mitigating building collapse in Nigeria: roles of Architects and other stakeholders in the building industry. *Civil and Environmental Research*, 7(8). Retrieved September 25, 2018 from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.903.1047&rep=rep1&type=pdf>
- [4] Bhaskar, P., Deshmukh, S. S., and Aradhana, C., 2016. Project management maturity in the construction industry of developing countries. *International Engineering research journal (IERJ)*, 2(3), 1106-1109. Retrieved June 3, 2018, from http://www.ierjournal.org/vol2iss3/5.Project_Management_Maturity_in_the_Construction_Industry_of_Developing_Countries_bhas_kar_paper.pdf
- [5] Brown, G., and Matysiak, G. 2000. *Real estate investment: A capital market approach*, (1sted.). London: Pearson Education Limited.
- [6] Chendo, I. G., and Obi, N. I. 2015. Building collapse in Nigeria: the causes, effects, consequences and remedies. *International Journal of Civil Engineering, Construction and Estate Management*, 3(4), 41-49. Retrieved September 20, 2018 from <http://www.eajournals.org/wp-content/uploads/Building-Collapse-in-Nigeria-The-Causes-Effects-Consequences-and-Remedies.pdf>
- [7] Damaoh, I. S. 2015. *An investigation into the causes and effects of project failure in government projects in developing countries: Ghana as a case study*. (Doctoral thesis, Liverpool John Moores University, United Kingdom). Retrieved August 30, 2018, from researchonline.ljmu.ac.uk/.../158244_2015%20Isaac%20Sakyi%20Damoah%20PhD.pdf
- [8] Essien, A., and Ajayi, S. 2017. The underlying causes of building collapse in the Nigerian construction industry. *International Journal of Scientific and Engineering Research*, 8(7). Retrieved August 24, 2018 from <https://www.ijser.org/researchpaper/The-Underlying-Causes-of-Building-Collapse-in-The-Nigerian-Construction-Industry.pdf>
- [9] Gambo, N., Said, I., and Ismail, R. 2016. Influences of cost factors affecting technical performance of local government projects in Nigeria: a partial least square-structural equation modelling (PLS-SEM) approach. *Journal of Construction in Developing Countries*, 21(1), 85–111. <https://doi.org/10.21315/jcdc2016.21.1.5>
- [10] Geschwender, A. 2015. *Real Estate Principles and Practices* (9thed.). Atlanta USA: Oncourse Learning.
- [11] Grefen, P., Pernici, B., and Sánchez, G. (Ed.). 2012. Database support for workflow management: the WIDE project (Vol. 491). Springer US: Springer Science & Business Media.
- [12] Ifediora, C. O., and Keke, O. V. 2019. Human Resources Management Practices and Real Estate Project Management Success in Awka South L.G.A., Anambra State. *International Journal of Civil Engineering, Construction and Estate Management (IJCECEM)*, 7(2) 1-15. Retrieved May 1, 2019 from <https://www.eajournals.org/journals/international-journal-civil-engineering-construction-estate-management-ijcecem/vol-7-issue-2-may-2019/human-resources-management-practices-and-real-estate-project-management-success-in-awka-south-l-g-a-anambra-state/>
- [13] Ifediora, C. O. 2015. *The implications of human resources management in real estate project management success in Awka south L.G.A., Anambra state*. (Master's thesis, NnamdiAzikiwe University Awka, Anambra State).
- [14] Ihuah, P. W. 2014. A review of soft and hard approaches of human resource management and the success of real estate development in Nigeria. *Journal of Business Management and Economic Development (JBMED)*, 1(1): 16-23. Retrieved August, 23, 2018 from <http://usir.salford.ac.uk/31516/>

- [15] Ihuah, P. W., Kakulu, I. I., and Eaton, D. 2014, A review of critical project management success factors (CPMSF) for sustainable social housing in Nigeria. *International Journal of Sustainable Built Environment*, 3, 62–71. <https://doi.org/10.1016/j.ijbsbe.2014.08.001>
- [16] Institute of Real Estate Management. 2011. *Principles of real estate management* (10thed.). Chicago USA: Publishing department of real estate management.
- [17] International Labour Organization. 2012. *Handbook of good human resource practices in the teaching profession*. Retrieved August 20, 2018, from http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_187793.pdf
- [18] Jacobus, C. J. (2006). *Real estate: an introduction to the profession* (11 ed.). Atlanta USA: Oncourse Learning.
- [19] Kamau, P. K., Mireri, C., and Usman, N. D. 2013, October 10-12. An assessment of the management systems in project performance within the building construction industry in Abuja, Nigeria. A paper presented at Architecture, Environment, Technology and Society in the Global South, Jomo Kenyatta University of Agriculture and Technology, SABS CONFERENCE. Retrieved July, 21, 2018 from https://www.academia.edu/5974713/AN_ASSESSMENT_OF_THE_MANAGEMENT_SYSTEMS_IN_PROJECT_PERFORMANCE_WITHIN_THE_BUILDING_CONSTRUCTION_INDUSTRY_IN_ABUJA_NIGERIA
- [20] Koirala, M. P. 2012. Risk in housing and real estate: Construction projects study in Nepal. (Doctoral Thesis, School of Industrial Engineering Singhania University, Pacheri Bari, Jhunjhunu (Raj.), India). Retrieved August, 23, 2018 from https://www.researchgate.net/publication/280561094_PhD_Thesis_Risks_in_Housing_and_Real_Estate_Construction_Projects_Study_in_Nepal
- [20] Malkani, Z. A. K., and Kambekar, A. R. 2013, Management of human resource in construction industry. *International Journal of Engineering Research and Technology*, 6(3). 353-362. Retrieved September 3, 2018 from www.irphouse.com/ijert/ijertv6n3_07.pdf
- [21] Mwai, K. J. 2014. *Factors influencing project completion in the housing construction industry, Nairobi country*. (Master project, University of Nairobi, Kenya). Retrieved September, 23, 2018 from http://erepository.uonbi.ac.ke/bitstream/handle/11295/76078/Munyoki_Factors%20influencing%20completion%20of%20construction%20projects.pdf?sequence=4
- [22] Nagamy, D. A. K. 2016. *A study of the causes and effects of abandoned residential projects in Malaysia*. (Master Thesis, Faculty of Technology Management and Business Universiti Tun Hussein Onn Malaysia). Retrieved August 30, 2018, from eprints.uthm.edu.my/6613/1/367.pdf.
- [23] Nwachukwu, C. C. 2009. Client's constraining factors to construction project management success in Nigeria: a systems analytical approach. *International Journal of Development and Management Review (INJODEMAR)*, 4(1). Retrieved July 23, 2018 from <https://www.ajol.info/index.php/ijdmr/article/view/51016>
- [24] Nwachukwu, C. C., and Emoh, F. I. 2011. Building construction project management success as a critical issue in real estate development and investment. *American Journal of Social and Management Sciences*, 2(1), 56-75. <https://doi.org/10.5251/ajsms.2011.2.1.56.75>
- [25] Nwachukwu, C. C. 2016. *Dimensions of real estate project management*. Owerri, Nigeria: Gabtony Prints Ltd.
- [26] Nwachukwu, C. C., Echeme, I., and Okoli, M. N. 2010. Project management factor indexes: a constraint to project implementation success in the construction sector of a developing economy. *European Journal of Scientific Research*, 43(3), 392-405. Retrieved June 3, 2018, from <http://www.eurojournals.com/ejsr.htm>.
- [27] Nzekwe, J. U., Oladejo, E. I., and Emoh, F. I. 2015. Assessment of factors responsible for successful project implementation in Anambra state, Nigeria. *Civil and Environmental Research*, 7(8), 39-57. Retrieved June 1, 2018, from <http://www.iiste.org/Journals/index.php/CER/article/view/24639>.
- [28] Nzekwe, J. U., Oladejo, E. I., and Emoh, F. I. 2015. Project failure as a reoccurring issue in developing countries: focus on Anambra state, south east Nigeria. *International Journal of Energy and Environmental Research*, 3(3), 1-20. Retrieved June 1, 2018, from <http://www.eajournals.org/wp-content/uploads/Project-Failure-As-A-Reoccurring-Issue-In-Developing-Countries.pdf>
- [29] Ofori, D. F. 2013. Project management practices and critical success factors – A developing country perspective. *International Journal of Business and Management*, 8(21). <http://dx.doi.org/10.5539/ijbm.v8n21p14>.
- [30] Ogunde, A.O., Olaolu, O., Afolabi, A., Owolabi J., and Ojelabi, R. 2017, challenges confronting construction project management system for sustainable construction in developing countries: Professionals perspectives (a case study of Nigeria). *Journal of Building Performance*, 8 (1) Retrieved July 23, 2018 from eprints.covenantuniversity.edu.ng/7736/
- [31] Okoye, P. U., Ngwu, C., and Ugochukwu, S. C. 2015. Evaluation of management challenges facing construction practice in Nigeria. *International Journal of Application or Innovation in Engineering and Management (IJAIEEM)*, 4(1). Retrieved September 3, 2018, from http://ijaieem.org/pabstract_Share.php?pid=IJAIEEM-2015-01-11-16
- [32] Olagunju, R. E., Aremu, S. C., and Ogundele J. 2013. Incessant collapse of buildings in Nigeria: An Architect's view. *Civil and Environmental Research*, 3(4). Retrieved, July 3, 2018, from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.846.4274&rep=rep1&type=pdf>

- [33] Olajide, S. E. 2018, March 22. *Developing framework for national economic development through effective real estate and sustainable infrastructural development in Nigeria*. Presented at Real Estate and Infrastructure as drivers of National Economic Development; the 48th annual conference of the Nigerian Institution of Estate Surveyors and Valuers, (pp. 142 -156). Abuja: The Nigerian Institution of Estate Surveyors and Valuers.
- [34] Onyali, A. O. 2017. *Correlates of project success in the Nigerian real estate construction sector*. (Doctoral Dissertation, College of Management and Technology, Walden University, USA). Retrieved August 30, 2018, from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?referer=https://www.google.com.ng/&httpsredir=1&article=5014&context=dissertations>
- [35] Oyebanji, A. O., Liyanage, C., and Akintoye, A. 2017. Critical Success Factors (CSFs) for achieving sustainable social housing (SSH). *International Journal of Sustainable Built Environment*, 6, 216–227. <http://doi: 10.1016/j.ijse.2017.03.006>
- [36] Oyeyipo, O. O., Odusami, K. T., Ojelabi, R. A., and Afolabi, A. O. 2016. Factors affecting contractors' bidding decisions for construction projects in Nigeria. *Journal of Construction in Developing Countries*, 21(2), 21–35. Retrieved September 25, 2018, from [http://web.usm.my/jcdc/vol21_2_2016/JCDC%2021\(2\)_Art%202\(21-35\).pdf](http://web.usm.my/jcdc/vol21_2_2016/JCDC%2021(2)_Art%202(21-35).pdf)
- [37] PricewaterhouseCoopers (PwC), 2014. *Real Estate 2020: Building the future*. Retrieved June 1, 2018, from <https://www.pwc.com/sg/en/real-estate/assets/pwc-real-estate-2020-building-the-future.pdf>
- [38] PricewaterhouseCoopers (PwC), 2015. *Real Estate: Building the future of africa*. Retrieved June 1, 2018, from <https://www.pwc.co.za/en/publications/real-estate-building-the-future-of-africa-2015.html>
- [39] PricewaterhouseCoopers (PwC), 2017. Emerging trends in real estate: the global outlook for 2017. Retrieved June 1, 2018, from <https://www.pwc.com/gx/en/industries/financial...real.../global-outlook-2017.html>.
- [40] Ribeiro, R. Paiva, A., Varajão, J. and Dominguez, C. 2013. Success evaluation factors in construction project management - Some evidence from medium and large Portuguese companies. *KSCE Journal of Civil Engineering*, 17(4), 603-609. <http://doi: 10.1007/s12205-013-0019-4>
- [41] Rusdi, I. F. 2013. *HRM practices and employee satisfaction in real estate business: A study on vision 21 design and developments Ltd*. (MBA dissertation, BRAC University, Dhaka, Bangladesh). Retrieved September 7, 2018, from <http://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/3147/06264013.pdf?sequence=1&isAllowed=y>
- [42] Satankar, P., and Jain, S. S. 2015. Study of success factors for real estate construction projects. *International Research Journal of Engineering and Technology (IRJET)*, 2(4). Retrieved September 2, 2018, from <https://irjet.net/archives/V2/i4/Irjet-v2i4i38.pdf>
- [43] Siew, R. Y. J. 2014. Human resource management in the construction industry – Sustainability competencies. *Australasian Journal of Construction Economics and Building*, 14(2), 87-103. <http://doi: 10.5130/ajceb.v14i2.3957>
- [44] Tijani, M. A., and Ajagbe, W. O. 2016. Professional view on the effects of construction projects abandonment in Ibadan metropolis, Nigeria. *Ethiopian journal of Environmental studies and management*, 9(5), 593-603. <http://dx.doi.org/10.43/ejesm.v9i5.6>
- [45] Ubani, E. C., Nwchukwu, C. C., and Nwokonkwo, O. C. 2010. Variation factors of project plans and their contributions to project failure in Nigeria. *American Journal of Social and Management Sciences*, 1(2), 141-149. <http://doi:10.5251/ajsms.2010.1.2.141.149>
- [46] Udomiaye, E., Ntaji, P., and Unyime, I. 2018. Incessant collapse of buildings in Nigeria: the implications for religious/ worship centres. *International Journal of Civil Engineering, Construction and Estate Management*, 6(2), 17-24. Retrieved August 2, 2018, from <https://www.eajournals.org/journals/international-journal-civil-engineering-construction-estate-management-ijcecem/vol-6-issue-2-july-2018/incessant-collapse-of-buildings-in-nigeria-the-implications-for-religious-worship-centres/>
- [47] Ugonabo, C. U. and Emoh, F.I. 2013. The major challenges to housing development and delivery in Anambra state of Nigeria. *Civil and Environmental Research*, 3(4). Retrieved August 20, 2018, from <https://www.iiste.org/Journals/index.php/CER/article/view/5044>
- [48] Ujene, A. O., Idoro, G. I., and Odesola, I. A. 2013. Contractors perceptions of effects of project overhead costs on building project performance in South-South of Nigeria. *Civil Engineering Dimension*, 15(2). <http://doi: 10.9744/CED.15.2.102-113>.
- [49] Yiman, A. H. 2011. *Project management maturity in the construction industry of developing countries (The case of Ethiopian contractors)*. (Masters Thesis, University of Maryland, College Park). Retrieved September 7, 2018 from https://drum.lib.umd.edu/bitstream/handle/1903.../Yimam_umd_0117N_12290.pdf
- [50] Zarina, A., Zawawi, E. M. A., Yusof, K., and Aris, N. M. 2014. Determining critical success factors of project management practice: a conceptual framework. *Procedia - Social and Behavioral Sciences*, 153, 61 – 69. <http://doi: 10.1016/j.sbspro.2014.10.041>