SHORTAGES OF SKILLS & COMPETENCES; CONSTRAINT TO PRIVATE SECTOR REAL ESTATE FUNDING IN THE EMERGING ECONOMIES

Lucy Ogbenjuwa¹, Charles Egbu and Herbert Robinson

School of the Built Environment and Architecture, London South Bank University, 103 Borough Road, London SE1 0AA, UK

There is a growing demand for real estate developments in the emerging economies due to population growth and the increasing middle class. This paper examines how shortages of skills and competences in the emerging economies have affected the ability of real estate private developers, including their access to funding for real estate projects. Through critical analysis of literature and case studies in Nigeria and South Africa, the study examined real estate developments with a view to assessing the impact of skills and competences on the development process and their ability to source project funding internally and externally. The findings suggest that the shortage of skills and competences amongst real estate private sector developers in the emerging economies is a major deterrent to both internal and external investors due to several factors including low production and substandard housing, inadequate environmental assessment which has resulted in reduced sales. A notable example is the case study cited in the Lekki area of Lagos, Nigeria where the Ocean waters floods the houses because of inadequate design and construction as a result of deficiencies in the skills and competences of the developers who built the estates. There is a need for enhanced skills and development of competences supported by a strategic framework with an enabling policy environment, legal framework, macroeconomic management regime that encourages private sector participation in real estate development.

Keywords: competences, private sector developers, funding, Lekki, Langa slums

INTRODUCTION

The real estate sector is capital-intensive but private sector developers often have challenges with accessing funding in the emerging economies (Zhang, 2017; Moldoch, 2009). Arguably, a major contributor to the funding challenge is the lack of skills and competences (Olaleye et al., 2008). The nature and level of skills and competences can be attributed to the system of formal or informal training and work experience required to perform given Tasks and duties (Hewage et al., 2011). Skills and competences in the real estate sector are in shortfall as compared to the needs of the sector. There is also a shortage in the type of experiences required. Blanksby and Iles (1992) argued that the operators in the real estate sector need talents with complex skills and competences sets. These skills and competences include technological literacy, an understanding of the global financial markets, fluency in multiple cultures, entrepreneurship, extensive network of varied relationship, contemporary leadership attributes including the ability to lead in a multiple and virtual organisation (Fulmer and Conger, 2004). Enhanced managerial and personnel skills and competences are also increasingly important as it helps to meet the demands of the financiers (Nitz, 1996; Rector, 2002). The aim of the study is therefore to analyse the impact of

_

¹ lucyogbenjuwa@yahoo.com

shortages of skills and competences on the ability of the real estate private developers to access funds and to implement successful projects.

METHODOLOGY

The methodology adopted is two- pronged approach. First, a desk review is carried out focusing on the type of skills and competences required by private sector real estate firms in the emerging economies, the impact of skills and competences on the real estate sector and the ability of the developer to access funding. Second, the research will draw on the experience of two case studies, which are Lekki in Nigeria and the South African Langa slum to analyse the impact of skills and competences on real estate development projects.

LITERATURE REVIEW

Skills and competences are required in the appraisal, funding and implementation of real estate projects. Bayatzis (1982) described skills as the sequence of behaviour that is functionally related to attaining a performance goal (Scott and Rochester, 1984). Skill is therefore associated with the ability to perform a task well. However, competence is the ability for the professional to exercise his or her skills in a fair and ethical manner (Meyer *et al.*, 2015). Competence enables skilled personnel to be termed a professional (Lester 2014) as it depicts superior work performance (Boyatzis, 1982). Competence is the ability to apply knowledge and skills to achieve an intended result. An individual becomes competent through a combination of education, training and work practice (Cheng *et al.*, 2003) resulting in the ability to perform tasks and roles to the expected standard.

Skills Needed by Private Sector Developers

This paper draws from the works of Boyatzis (1982), Katz (1971) and Muthuveloo et al (2017) on generic skills and competences to determine the framework of skills and competences needed by private real estate firms to access funding for projects. The paper therefore, classifies the skills and competences needed by the management and employees of private real estate developers to access funding into five, namely, human, technical, conceptual, political and financial skills and competences. This classification is in agreement with the CIOB (2013) report exploring skills in the UK construction industry. This study however, incorporates a more detailed human, political and financial skills needed by the manager and his/her team to facilitate execution of real estate projects including securing funding.

Human Skills and Competences

The human skills and competences include non-cognitive skills, social and self-competences (Meyer *et al.*, 2013). Social competence includes teamwork, communication skills, adaptability, integrity and emotional intelligence (Salovey and Meyer, 1990). Self-competence on the other hand includes independence, ability to cope with pressure, learning abilities, reliability and willingness to work (Meyer *et al.*, 2015). Diligence and discipline can be added to the human skills and competences. The former British Prime Minister, Winston Churchill once said that, "the price of greatness is responsibility" (Oyedepo, 2017). Discipline implies possessing a sense of mission in the pursuit of a task, while, diligence simply means hard work (Oyedepo, 2017). Humility can also be added to the human skills and competence (Rojas, 2013). Private sector real estate developers should harness the human skills and competences

in achieving execution of real estate project with effective communication, motivation, teamwork and mutual trust.

Technical Skills and Professional Competences

Technical skills and professional competences refer to the skills and knowledge an employee needs to have in order to practice their occupation. It includes interdisciplinary knowledge, skilfulness and accuracy of execution. Technical skills and professional competence positively affect production, subordinate job satisfaction and subordinate ratings (Hysong, 2008). Technical skill and professional competence is valuable to a developer and their team as a source of credibility and a means to identify with subordinates. Good examples of technical skills and professional competences a private sector real estate firms needs are, availability of skilled personnel like Architects, and Engineers, with virtual, design, negotiation, teaching and training and technological skills (Hysong, 2008). It is the limited technical skills and competences amongst construction professionals that leads to inappropriate designed projects amongst other types of construction failures (Edirisinghe *et al.*, 2016; Weshah, 2013). Technical skills and professional competences is mandatory for successful project execution and this constitutes a part of the historical traits financiers look out for as conditions precedent to funding (Rector, 2002).

Political Skill and competences

Political skills and competences are needed by managers to effectively influence all stakeholders in the path of their job (Montalvo and Byrne, 2016). Political skills in the light of real estate funding are skills the manager and personnel need to influence all stakeholders, which include, subordinates, superiors, government agencies and the financiers. These skills are innate as well as taught (Brouer et al., 2015). Political skills are important antecedent of performance outcomes, particularly when increased social interactions are part of the manager's job requirement. Consequently, political skills and competences helps the real estate manager to relate effectively with all the stakeholders of a project and to navigate the real estate development process that is often complex. Political skills include social astuteness, savvy and positioning (Mintzberg, 2009). A manager and personnel with political skills and competences should be skilled in agreeableness, which signifies that s/he is sympathetic, kind, altruistic, generous, fair and eager to help others (Banister and Meriac, 2015). A person can be considered politically skilled and competent when she / he has social intelligence. Managers in the real estate sector are encouraged to obtain political skills and competences to succeed in their organisations as well as succeed in accessing funding for their projects.

Conceptual skills and cognitive competences

Conceptual skills and competences are the "thinking abilities" needed by managers and personnel of private real estate development firms. These are logical thinking, analytical abilities, inductive and deductive reasoning. Conceptual ability is to integrate and apply obtained knowledge through the power of analysis. Conceptual skills and competences reflect the ability of the manager and workers to use information to achieve knowledge, derived from data originating from various sources (Este, 2012). Lack of conceptual skills and cognitive competence arguably could contribute to the lack of up-to-date skills and competences experienced in emerging economies. It is reflective in paucity of new developments in contemporary built environment such as internet of things and building information modelling (Berst, 2016).

Financial management skills and competences

The managers in the private sector real estate firm and key staff need fundamental financial management skills and competences to be able to access funding for their projects in addition to the other skills sets. These skills are considered amongst the most critical management skills and competences. Financial skills and competences include cost benefit analysis, budget preparation, financial trend analysis and costing (Grizzle, 1985).

Impact of Skills and Competences on Real Estate Development in the Emerging Economies

A blend of all the skills and competences is necessary for private sector real estate firms to be successful in project execution and to access funding for real estate projects. However, the real estate sector in South Africa is characterised with imbalances in skills and competences because of its unique historical and political challenges (Powell *et al.*, 2016). The real estate sector in Nigeria is associated with lack of skills and competences essentially because of failures in the educational system and professional institutions. Fundamental problems of skills and competences include lack of qualified workers, lack of effective leadership, insufficient and lack of state-of-the art information and technological knowledge (Ozorhon and Karahan, 2017). Skills and competences affecting real estate developers in emerging economies can be analysed from four dimensions and they are capacity gaps and shortages, mismatch and lack of up-to-date skills and competences.

First, the problems of capacity gaps and shortages in skills and competences encountered by private sector developers in the emerging economies usually stems from the educational background of managers and personnel (Cappelli,1999). The educational systems in most emerging economies apart from China have not been able to equip prospective workforce with adequate skills (Cook, 2017). The educational lapses also creates a skills and competence shortages, evidenced in lack of sufficient workforce. The shortage of skills and competences disrupts the developer's ability to prepare bankable projects, develop and implement projects to meet up with project schedules. This can lead to longer project execution tenure, which could constitute a constraint to early payment of existing debts as well as inhibit access to new funding.

Second, there is also the problem of mismatch of skills and competences which occurs when available skills and competences of existing workforce are not consistent with what is required for their work. This mismatch can lead to increased cost to the firm, reduced productivity, high turnover rate of employee, low job satisfaction and unfulfilled career expectation for the employees (Yin, 2016). All of these can lead to cost overruns for the firm and could adversely affect its ability to pay back existing debt and inhibit access new funding (Mishkin and Eakins, 2015). Arguably, there is inadequate usage of human skills and competences in most private sector real estate development firms in emerging economies which can create a mismatch in skills and competences resulting in demotivated workforce with a high labour turnover because of a lack of formal training and career structure in real estate.

Third, the lack of up-to-date and state-of-the art skills and competences are a notable challenge to private sector real estate firms in both South Africa and Nigeria. Skills and competences required by private sector firms in the built environment need to be continually reviewed and enhanced. The global economy is rapidly evolving and private sector developers need to enhance existing skills and develop new skills of the managers and workforce to remain relevant and competitive (Mothso, 2016).

There are catalogue of problems in terms of capacity gaps, shortages, mismatch and lack of up-to-date or state-of-the art skills and competences challenge, in South Africa and Nigeria which has led to inappropriately designed and implemented projects, abandoned projects, collapsed building, disputes, arbitrations, litigations, loss of investor's funds, termination of contracts and sometimes death of people (Edirisinghe *et al.*, 2016; Thal *et al.*, 2010). All of these constitute a major challenge to securing funding for real estate development projects (Rector, 2002). Lenders look at long-term records of accomplishment of the firm as well as their ability to repay back as a premise for funding projects (Rector, 2002; Nitz, 1996).

ANALYSIS AND DISCUSSION OF CASE STUDIES IN REAL ESTATE SECTOR

Lekki Project in Nigeria

Lekki is a city in Lagos, Nigeria with a reputation as an area with some of the most expensive real estate assets in Lagos and Nigeria as a whole. Lekki settlements with its catchments and wetland make up about 71% of Lagos State covering an area of 755 Km2. It is an environment with great potential because of its status of free trade zone with planned massive investments such as deep seaport, Dangote Refinery, International Airport and massive residential settlement (Adeboye, 2018).

Private real estate firms through land reclamations are responsible for much of the developments in the region (Ayeyemi, 2017). The reclamations displaced sensitive natural ecosystems consisting of wetlands vegetation and water bodies. Furthermore, the reclaimed land and developments are not adequately protected against ocean surge. Thorough environmental and social impact assessments were not done before commencement of reclamations. This inhibited the capacity to retain and dispel flood amongst other environmental issues, consequently contributing to massive flooding, collapsed buildings and death of people (Fatal collapse, 2016).

Inadequate usage of technical skills and competences during the reclamation and real estate project development process led to the problem of flooding, collapsed buildings and ocean surge bringing sea animals and reptiles to people's residence (Danladi, 2001). Furthermore, the infrastructure in Lekki reflected in poor drainage channels built by developers, roads that are almost impassable in the dry season and dangerous in the raining season is as a result of inadequate technical skills and competences (Njoku, 2012). The problem of insufficient technical skills has also contributed to so many of the seemingly beautiful Lekki buildings with cracked walls that rendered some properties inhabitable (Adegboye, 2018). The catalogue of problems created as a result of mainly inadequate technical and professional skills and competences but also conceptual skills and competences negatively affected the planning, preparation, design and construction of the properties, the marketability of the properties and the ability of the developers to get further funding.

With appropriate technical skills sets and competences, well-planned and successful land reclamations would have been done in Lekki drawing on best practices and state-of the-art knowledge from similar developments in Netherlands, China, South Korea and England (Wee, 2017; Tagliabue, 2008). Real estate developers in Lekki and their managers should have addressed the problems of capacity gaps and shortages, mismatch and lack of up-to-date skills and competences required to benefit from best practices as it would have mitigated against the flooding, cracked buildings, collapsed buildings and unsustainable infrastructure that is prevalent in most parts of Lekki. Furthermore, financiers will want to collaborate with private real estate firms who

have a repository of successful projects as a proof of their expertise, skills and competences.

Langa Project in South Africa

Langa slum is one of the various slums in South Africa and visitors sometimes use it for slum tourism (Besner, 2013). The development of such slums is usually because of failing macroeconomic factors such as high unemployment rate, high interest rate and inflation (Fox, 2014).

Langa slum is on the outskirt of Cape Town and it is an offshoot of municipal houses (Palin, 2018). The evolution of the municipal settlement to slums is arguably due to failure of government to work with the local community, developers and other stakeholders to address the needs of the community. It is also a reflection of lack of skills and competences as the settlements were not sustainable in the long- run because of population boom.

The dehumanising environment is not just a government failure but lack of involvement of private sector real estate firms who are primary players in the built environment, the impact of shortages and gaps in the skills and competences of the community real estate developers. The situation of this slum limit access to funding for an average developer that will want to provide housing in this neighbourhood.

According to Aljazeera's report of 2016, the situation is bad for hostel residents in the slums as they do not have good sanitary facilities and live in very cramped up situation. Government has made provisions but are grossly insufficient (Hyatt, 2016). The availability of conceptual, political, financial and technical skills by developers and local community would have helped in collaborating with financiers and the government to provide a sustainable environment for the increasingly growing population. Political skills and competences were clearly needed in the project to influence key stakeholders to collaborate, particularly established developers to work with the local community and the government. Strong conceptual and financial skills were also critical to arrive at a scheme that is financial feasible and sustainable for it to work for the community and the established neighbourhood.

Furthermore, considering that a slum is now in existence, developers of the rich nearby neighbourhood, Cape Town can as a part of their corporate social responsibility use their skills and competences, to access creative and innovative funding which can be used to gradually upgrade the slums to decent settlements that will be self-sustaining creating a vibrant community. The real estate projects could be a basis to attract high tech jobs and activate of the community's economy through the creation of skilled and unskilled employment (Berst, 2016). Based on past experience in India and other Asian city slums, using a blend of skills and competences would have helped in securing adequate funding which would have transformed slums into modernised settlements, and provided platforms to integrate the poor into the society (Roy, 2014).

Both case studies raises important issues about type of skills and competences required for each project, and associated factors that can be seen as key drivers for skills and competences such as standards in the development process and professionalism. First, the availability of appropriate technical skills and competences for the developer in Nigeria or political and conceptual skills for the community-led development in South Africa would have provided the opportunity to develop and implement real estate projects which would have been both successful and sustainable.

Second, there is a need for standards for real estate development and a professional career structure. In the developed countries, unlike emerging economies like South Africa and Nigeria, standards are developed for professionals which are expected to be applied and enforced throughout. The standards will drive professionals to develop and maintain their skills and competences to accommodate changes in practice, technology and regulations (Lester, 2017). Furthermore, there is transparency amongst real estate professionals in the developed countries to enhance good practices and ethics due to a well-established career structure regulated by professional institutions to ensure that skills and competences are developed and maintained through continuous professional development (CPD) accredited programmes. The responsibility is therefore on the real estate developers to employ professionals that have acquired the requisite skills and competences, whether it is technical, political, conceptual and financial skills. Such skills and competences are important in attracting both local and international financiers and in providing assurance that real estate projects will be developed in line with best practices. There is an increase in the international mobility of funding through various mediums such as foreign direct investments, joints ventures, derivatives, securitisations and others (Melvin and Norrbin, 2012). The funders often provide covenants that will enhance their investment safety and return for different regions reflecting the macro-economic conditions and other factors including skills and competences.

There is a therefore a need for a framework for the development of skills and competences in emerging economies to facilitate real estate development including accessing funding for real estate projects. The next stage of the study will focus on developing a framework to measure the different skills and competences of real estate firms in the development cycle based on the classification provided in the literature in selected countries including Nigeria and South Africa, which will also reflect established body of knowledge by professional bodies such as APM, CIOB and RICS.

CONCLUSIONS

This study shows how shortages of skills and competences can hinder the real estate development process and militate against the real estate developer's access to funding for their projects. The study noted that a range of skills and competences are needed by the real estate developers such as human, technical and professional, conceptual, political and financial management skills and competences. The lack of appropriate skills and competences has a significant negative impact in the emerging economies visa-vis what the financiers require from developers. Based on case studies from the Lekki housing project in Lagos, Nigeria and the Langa slums in South Africa, insights and lessons were drawn in the development of real estate projects. Key lessons learnt included the flooding, collapsed buildings and unsustainable infrastructure in Lekki as a result of inadequate skills and competences, inappropriate development process that resulted in the Langa slums in South Africa as result of the Government failure, lack of collaboration with communities and involvement of developers with the appropriate skills and competences to transform the slums into sustainable real estate development. It was also noted that shortages of skills and competences mitigates against the real estate developers ability to access both local and international funding. Financiers will want to collaborate with private real estate firms who have a repository of successful projects and the skills and competences. The study recommends that private real estate firms should improve the skills and competences of their workforce which can be done through mentoring, education and training but this needs to be

supported by an enabling policy environment, legal framework, macroeconomic management regime that encourages private sector participation. .

REFERENCES

- Adegboye, K. (2018) Developers unfold potentials in Lekki Property Market. Available at: https://www.vanguardngr.com/2018/01/developers-unfold-potentials-lekki-property-market/ (Accessed on 1st April 2018).
- Ayeyemi, D. (2017) Reclamation: Lagos emerging water cities. Available at: https://newtelegraphonline.com/2017/11/reclamation-lagos-emerging-water-cities/ (Accessed on 27th March 2018).
- Banister, C. M. and Meriac, J. P. (2015) Political Skill and Work Attitudes: A Comparison of Multiple Social Effectiveness Constructs, *Journal of Psychology*, 149 (8), pp. 775-795.
- Berst, J. (2016) The same technology that makes your city smarter can bring in new jobs, American City and County Exclusive Insight, 1-1.
- Besner, L. (2013) How to look at poor people. Available at: https://hazlitt.net/feature/how-look-poor-people (Accessed on 3rd April, 2018)
- Blanksby, M. and Iles, P. (1992) Assessing management skills :a guide to competencies and evaluation techniques. London: Kogan Page.
- Boyatzis, R. E. (1982) The competent manager :a model for effective performance. New York; Chichester: Wiley.
- Brouer, R., Badaway, R., Gallagher, V. and Haber, J. (2015) Political Skill Dimensionality and Impression Management Choice and Effective Use, Journal of Business and Psychology, 30 (2), 217-233.
- Cappelli, P. (1999) The new deal at work :managing the market-driven workforce. Boston: Harvard Business School Press.
- Channels Television (2017) Lagosians lament as flood hits Lekki, Victoria Island. Available at: https://www.channelstv.com/2017/07/08/lagosians-lament-as-flood-hits-lekki-victoria-island/ (Accessed on 28th March 2018).
- CIOB (2013). The chartered institute of building. A report exploring skills in the UK construction industry. Available at: www.ciob.org/sites/default/files/skills% report (accessed on 27th May, 2018)
- Cook, T. (2017) This is the number 1 reason we make iphones in China (its not what you think). Available at: https://www.inc.com/glenn-leibowitz/apple-ceo-tim-cook-this-is-number-1-reason-we-make-iphones-in-china-its-not-what-you-think.html (Accessed on 5th April 2018).
- Danladi, I. B. (01) Vulnerability of the Nigerian coast: An insight into sea level rise owing to climate change and anthropogenic activities. Journal of African Earth Sciences (1994), 134, 493-503.
- Drubin, C. (2015) Global Research Reveals the Importance of the IoT to Developing Economies, Microwave Journal, 58 (4), 99-100.
- Edirisinghe, R., Stranieri, A. and Blismas, N. (2016) Information visualisation for the wicked problem of safe construction design, Architectural Engineering and Design Management, 12 (4), 296-310.
- Fatal collapse, (2016) International Construction, 55 (3), 8-8.
- Fox, S. (2014) The Political Economy of Slums: Theory and Evidence from Sub-Saharan Africa, World Development, February 2014, 54, 191-203. DOI: https://doi.org/10.1016/j.worlddev.2013.08.005.

- Fulmer, R. M. and Conger, J. A. (2004) Growing your company's leaders :how great organizations use succession management to sustain competitive advantage. New York: Amacom.
- Grizzle, G. A. (1985) Essential Skills for Financial Management: Are MPA Students Acquiring the Necessary Competencies? Public Administration Review, 45 (6), 840-844.
- Hewage, K. N., Gannoruwa, A. and Ruwanpura, J. Y. (2011) Current status of factors leading to team performance of on-site construction professionals in Alberta building construction projects, Canadian Journal of Civil Engineering, 38 (6), 679-689.
- Hyatt, S (2016) Residents of hostels and slums in Langa are demanding improvements in their housing and living conditions. Available at:

 https://www.aljazeera.com/indepth/features/2016/09/south-africa-housing-crisis-remnant-apartheid-160929094237631.html (Accessed on 2nd April 2018).
- Hysong, S.J (2008) "The role of technical skill in perception of managerial performance", Journal of Management Development, Vol. 27 Issue: 3, 275-290
- Lester, S. (2014) "Professional standards, competence and capacity", Higher Education, Skills and Work-based learning, Vol. 4 Issue: 1, 31-43,
 - Melvin, M. and Norrbin, S. C. (2012) *International money and finance*. 8th ed. Boston: Elsevier Press.
- Meyer, G., Brunig, B and Nyhuis, P. (2015) 2 Employee competences in manufacturing companies an expert survey", Journal of Management Development, Vol. 34 Issue: 8 1004-1018 Permanent link to this document:
- Mintzberg, H. (2009; 2011) Managing. San Francisco: Berrett-Koehler Publishers.
- Mishkin, F. S. and Eakins, S. G. (2015; 2015) *Financial markets and institutions*. Eighth ed. Boston: 4: Pearson.
- Montalvo, W. and Byrne, M. W. (2016) Mentoring Nurses in Political Skill to Navigate Organizational Politics, Nursing Research and Practice, , 1-8.
- Monthso, M. (2016) North West government spend R54M on abandoned housing project. Available on: https://mg.co.za/article/2016-04-07-north-west-local-government-spent-r54m-on-abandoned-housing-project (Accessed on 3rd April 2018).
- Muthuveloo, R., Kang, C. C. and Ping, T. A. (2017) An Empirical Analysis of the Perceived Skills in Predicting Managerial Effectiveness: The Malaysian Perspective, *Global Business & Management Research*, 9, pp. 41-59.
- Nitz, N. H. (1996) Where's the cash? Secured Lender, 52 (6), pp. 124.
- Njoku, J (2012) Lekki, a time bomb waiting to explode. Available at: https://www.vanguardngr.com/2012/09/lekki-a-time-bomb-waiting-to-explode/ (Accessed on 27th March 2018).
- Olaleye, A., Aluko, B. T. and Oloyede, S. A. (2008) Evaluating Diversification Strategies for Direct Property Investment Portfolios, Journal of Real Estate Portfolio Management, 14 (3), 223-231.
- Oyedepo, D (2017) The Path of the Eagle. Dominion publishing house
- Ozorhon, B. and Karahan, U. (2017) Critical Success Factors of Building Information Modeling Implementation, Journal of Management in Engineering, 33 (3), 1-10.

- Palin, M (2018) Shanty town life: 'They will beat their mothers with a brick'. Available on: http://www.news.com.au/travel/world-travel/africa/shanty-town-life-they-will-beat-their-mothers-with-a-brick/news-story/e3f1d26dadf11daafc93c33629758fe8 (Accessed on 27th May, 2018).ss
- Powell, M., Reddy, V. and Juan, A. (2016) Skills in South Africa: The journey towards credible planning, Development Southern Africa, 33 (3), 298-311.
- Rector, K (2002) What lenders want: America Machinist, 10417958 Vol 146, issue 11
- Rojas, E. M. (2013) Identifying, Recruiting, and Retaining Quality Field Supervisors and Project Managers in the Electrical Construction Industry, Journal of Management in Engineering, 29 (4), 424-434.
- Roy, A. (2014) Slum-free cities of the Asian century: Postcolonial government and the project of inclusive growth, Singapore Journal of Tropical Geography, 35 (1), 136-150
 - Salovey, P. and Mayer, J. D. (1990) Emotional Intelligence, *Imagination, Cognition and Personality*, 9 (3), pp. 185-211.
- Scott, J., Rochester, A. and British Institute of Management (1990; 1984) What is a manager? London: Sphere/British Institute of Management.
- Tagliabue, J. (2008). The Dutch seek to claim more land from sea. The New York Times. Available at: https://www.nytimes.com/2008/11/07/world/europe/07iht-journal.1.17618884.html (Accessed on 28th March 2018).
- Thal, A. E., Cook, J. J. and White, E. D. (2010) Estimation of Cost Contingency for Air Force Construction Projects, Journal of Construction Engineering and Management, 136 (11), 1181-1188.
- Thompson, P.J (1995), "Competence-based learning and qualification in the UK", Accounting Education, Vol. 4 No 1, 5-15
- Wee, R. (2017) Countries with the most land reclaimed from seas and wetlands. Available T https://www.worldatlas.com/articles/countries-with-the-most-reclaimed-land.html (accessed on 28th March 2018).
- Yin, L. (2016) Overeducation in the Chinese labour market. A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy, The University of Sheffield.
- Zhang, J. (2017) Research on BIM Technology's Financing and Realization of Real Estate Project Financing under Large Data Background, Revista De La Facultad De Ingenieria, 32 (4), 709-716.
- Zhong, Y., Wang, X., He, G. and ProQuest (2010) The economic theory of developing countries' rise. Lanham: University Press of America.