

ASSESSMENT OF FACTORS AFFECTING PERFORMANCE OF CONSTRUCTION ORGANISATIONS IN ABUJA, NIGERIA

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Abstract:

The performance of organisations is often affected by lots of factors. These factors differ from one industry to the other; and the performance of construction organisation has a significant effect on the economy. It is a known fact that majority of construction organisations in Nigeria are not performing and this problem has led to delays in project delivery, failure in achieving effective time and cost performance, and poorquality projects. This paper aimed to assess factors affecting the performance of construction organisation in Abuja with a view to improving performance of construction organisations. In achieving this aim, well-structured questionnaires were designed and distributed to two hundred respondents (200) in fifty (50) building and civil engineering construction organisations practising in Abuja, Nigeria. 186 questionnaires were retrieved and used for the analysis. Mean item score was used to calculate the factors according to their frequencies. The scores were ranked and it was found out that the factors that must be given importance to when planning on achieving better construction organisational performance were cash flows with MIS of 4.75, knowledge management with MIS of 3.75, and governance and economic policies with MIS of 3.75. the paper concluded from the output of the results that, construction organisations in Abuja should focus on knowledge management, cash flows, governance and economic policies, in order to achieve better construction organisational performance. The study recommends more focus on these factors to achieve a desired performance for construction organisations in Abuja, Nigeria. Keywords: Affecting, Construction, Factors, Organisations, Performance.

INTRODUCTION

The performance of the organisations has been a problem to stake holders in the Nigerian construction industry (Babalola *et al.*, 2015). The rate at which these organisations are folding up or going out of business is alarming. For instance, in 2015 to 2018 alone more than fifty (50) of the construction companies in Abuja folded up, in which over twenty thousand (20,000) of the construction employees lost their jobs (Nigeria Economic Summit Group & Development 2018). This is a serious loss to the Nigerian economy which is just recovering from recession (Ezeh, 2013).

The alarming rate at which construction organisations' products deteriorate is a serious concern to all the stakeholders (Babalola *et al.*, 2015). Most of these problems are due to poor performance of these organisations. Performance of an organisation is affected by a lot of factors, these factors have a lot of influence on organisations' performance which cannot be neglected (Moulin, 2017). Factors that affect organisational performance differ from one industry to the other. The factors that affect organisational performance in the manufacturing industry or banking industry are different from those that affect organisational performance in construction industry Tripathi and Jha (2017). This is so because every industry has

uniqueness that makes it different from the other industry. It has also been acknowledged by many authors and researchers that the construction industry has its uniqueness on its products and size. This paper aimed at assessing all the factors that have been highlighted by the previous authors and determines the factors that have more influence on construction organisation using Abuja construction organisations as a study with a view to improving performance of construction organisations.

Factors affecting construction organisational performance

Ahmad (2017); Tegan *et al.* (2014) grouped factors that affect construction organisational performance into two, internal and external factors. Internal factors were further divided into the contractor and consultant related factors (Tripathi and Jha, 2017). Internal factors are the factors that are within the reach and control of the management of organisations while external factors are the factors that are beyond the control of the management, they are the factors that is control by the environment in which the organisation find itself.

Contractor Related Internal Factors

Ezeh (2013), Yaghoobi and Haddadi (2016) and Yu et al. (2017) highlighted the following as contractor related internal factors; Poor Planning and control techniques (knowledge management), Poor financial control on site (Cash flow), Lack of training on quality for staff (motivation), Lack of Management leadership, Lack of management commitment to continual quality improvement, Organization culture, High Level of competition, High number of competitors, Resource wastage on site, Lack of previous experience of contractor, Lack of technical and professional expertise and resources to perform task, Lack of education and training to drive the improvement process;

Cash flow

Cash flow problem is a situation where organisations do not have enough cash to pay for the running of their business. Cash flow is described in construction projects in two ways, the net receipt or net disbursement resulting from receipts; and disbursements occurring in the same period (Ezeh, 2013). Cash flow problems are the main cause of organisations' financial difficulties which subsequently affect both technical and management performance practices of the organisations. The problems associated with cash flow are: delay in settling of claims and agreeing of variations/day works, under valuations of performed works, clients' insolvency and delays in payments of approved valued works (Yu et al., 2017). Cost factors are important in construction organisations performance by implication and it has a strong relationship with performance of construction organisations in Nigeria.

ii. Organisational Culture (OC)

Scholars have defined OC as shared values and beliefs held by individuals that form the basis for patterns of behaviour in solving problems. Saunila (2016) argued that the core content of OC covers beliefs, values and assumptions held by individuals within organisations. In contrast, Ahmad (2017) opined organisational culture as a behaviour that determines how an organization grasps and reacts to the external and internal environments, thus embedding the reaction to the organisational environment in the definition of OC. Many attributes concerning OC emerge in the literature. It has been considered to guide individual communications within an organisation and to be a critical antecedent factor for the success of knowledge management initiatives (Saunila, 2016).

iii. Leadership

Leadership is the prime factor affecting the success or failure of organisations (Bakotić, 2016). It is the process in which one individual exerts influence over others. Leadership is a process that enables a person to influence others to achieve a goal and directs an organisation to become rational and consistent (Ahmad, 2017).

In organisations where there is confidence in the leaders, employees will look towards the leaders for almost everything. During drastic change in times, employees will perceive leadership as supportive, concerned and committed to their welfare, while at the same time recognising that tough decisions need to be made (Moullin, 2017). True leadership states that leadership skills can be mastered by people who wish to become leaders. The two very important components of effective leadership are: One is belief and confidence in leadership, which is an indicator of employee satisfaction in the organisation. The second is effective communication by the leadership in making the employees understand the business strategy, helping them understand and contribute to the achievement of the organisation's business objectives and sharing information about organisation with the employees for their benefit and guidance (Sigalas, 2015).

iv. Motivation

Motivation is a catalyst to move individuals toward goals. Motivation is the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal (Yuliansyah et al. 2017). Motivation may be defined more formally as a psychological or internal process initiated by some need, which leads to the activity which will satisfy that need, therefore motivational factors differ from person to person (Ahmad 2017). According to Abraham Maslow theory there are five levels of human needs which need to be fulfilled for individuals at work. According to this theory the needs are structured into a hierarchy which starts at the lowest level of need up to the highest level when the needs of the workers are fully met. A worker can be motivated by the opportunity of having the next need in the hierarchy satisfied (Ahmad 2017). According to Yang and Lu (2013) there are two main factors of motivation: Contextual factors and Descriptive factors. Contextual factors are factors like salaries, working conditions, organisation strategy. Descriptive factors are threats, opportunities, competences, sense of belonging. Motivation factors that are affective and effective in one employee or in a group of employees may not be affective or effective in others. This is an area where study and feedback will have to be carried out when measuring organisational performance (Ahmad 2017).

v. Knowledge management

Knowledge management is a concept in which an organisation deliberately gathers, organises, shares and analyses its knowledge in terms of resources, documents and people skills (Yaghoobi and Haddadi, 2016). As a result of technology advancement the way we access and embodies information has changed; in the current scenario many organisations have knowledge management frameworks in place. Knowledge Management has become a treasurable business tool; its complexity is often vexing and as a field will still be under development for a long time to come. Knowledge management will be integrated into the basket of effective management tools. The objective of Knowledge Management is to build and exploit intellectual capital in an effective and profitable manner this is an important factor to note when measuring performance measurement (Tripathi and Jha, 2017).

Consultant Related Internal Factors

Mathew *et al.* (2013) and Gambo and Said (2014) identified the following factors as consultant related factors; Fraudulent practices and kickbacks, Inadequate project team capability. Poor Information and communication channels, Inadequate Early and continual client/consultant consultation by contractor, Project managers competence / experience, Lack of On-Site project manager/ supervisor/ clerk of works, employee commitment and understanding, coordination between designers and contractors, Poor Monitoring and feedback, team work among stakeholders. Some of the factors highlighted are explained briefly below;

i. Fraudulent practices

This has been found out by Mathew *et al.* (2013) as the most severe factors that affect performance of organisations in Nigeria. The problems associated with fraudulent practices in construction industry are; actions not taken for non-compliance with the terms and conditions of contract, double payment for same item, and substitution of specified item with used or inferior ones, payments made on cost not incurred, falsification of contract documents and given gratitude to induce a party in the contract (Mathew *et al.*, 2013).

Gambo and Said (2014) identified fraudulent practices in the construction industry as one of the main factors affecting organisational performance in Nigeria. Mathew *et al.* (2013) reported that fraudulent practices and kickbacks are the most severe factors causing poor performance of organisations in Nigeria. Gambo and Said (2014) acknowledged that all government-funded projects in developing countries are mostly political in nature; this invariably leads to poor cash flow and fraudulent practice. Fraudulent practice is seen as the intent to deceive through false representation of a matter or a fact.

External Factors

Ahmad (2017) and Tegan *et al.* (2014) identified the following factors as external factors that have effect on construction organisations' performance; Bad governance, Irregular economic decision by government, International relations, Macro-economic conditions, Political conditions/ Political unrest, Nature of construction environments, Socio-cultural conditions, Legal condition, Intense rivalry between companies, New entrants to the market, Supply power, Client power

Nature of the construction environment affects the technical performance of projects; this has become a major issue to stakeholders in the construction industry (Horta, 2016). The problems associated with the nature of construction environments are: harsh construction sites, civil commotion/disturbances, topography of the construction/working site, site's constraints and storage limitations, availability and supply of labour to the site, hostile political and economic environments (Saunila, 2016).

The problem of water pollution is also seen as an important factor affecting performance of organisation by Pekkola *et al.* (2016). The effects of the nature of construction/working environments have significant impact on both financial, technical and management practices of organisations (Ryan, 2018). Gambo *et al.* (2017) reported that the effects of environment on organisational performance have a cumulative impact on the quality of products and further divided it into permanent and temporary effects. The permanent effects comprised meteorological trends like storms, geological process like soil and strata characteristics and long term environmental trend like climate changes (Gambo *et al.*, 2017).

The temporary effects comprised chemical, biological and ecological effects as well as social and political conditions such as land use acts, development trends, regulations, social trends

and public safety (Ryan 2018). The nature of construction/working environments affects not only the projects themselves but also the project sites, materials and equipment used to build the projects such as concrete, timber, clay, sand, gravel, steel (Silvi *et al.*, 2015).

All the factors identified and highlighted above are adopted in this study.

METHODOLOGY

This research employed the survey approach through the use of well-structured questionnaires. The construction organisations considered for the research were civil and building organisations active and practicing in Abuja, Nigeria. The survey strategies approach provided a focus for this research with the efforts to address the research problems.

The quantitative method was used to examine the factors that affect construction organisational performance in Abuja, Nigeria. The targeted population for this study were management members of fifty (50) construction organisations practicing in Abuja, Nigeria. This were. randomly chosen by the use of simple random sampling techniques from the Federation of Construction industry (FOCI) directory. The respondents were professionals and nonprofessionals who were management members of these organisations. These management members were chosen using judgemental sampling techniques the sample frame for this study is the multinational and some national construction organisations practicing in Abuja who are into building, civil and heavy engineering works. It was found out that each organisation had an average of five management members that were willing to fill the questionnaires as at the time of collection of data. This management staff are the head of units in the organisations. Using the formula in Glenn (2013) the number of questionnaires distributed were 200 and the number retrieved were 186; this gave a response rate of 93% and this was used for the analysis. The questionnaire survey was used in this research to get the views and opinions of the management staff on the factors that affect performance of their organisations. These questionnaires were close ended and structured questionnaires; the questionnaires were in two sections, section A and B section. Section A was profile and questions that related to the background of the respondents and organisations, while section B was the list of factors affecting construction organisations. These factors were scaled from 1 to 5 using the following scale; Very low = 1 low = 2, moderately low = 3, High= 4 and very high= 5 (Likert scale). Descriptive methods that is; Mean Item Score (MIS) was used to determine the most frequent factors from the respondents.

RESULTS AND DISCUSSION

Table 1 shows the background of the respondents and the organisations. The respondents have more of male (58.60%) than female, also the client based organisations which is 39.80% are more than contractor and consultant based organisations. The organisations that have spent between 11 to 20 years in practice were more (29.03%). The organisations that have staff strength of 201 to 500 were also more (26.85%). This just confirms the previous studies that usually reported Nigerian construction industry as one of the employers of large labour force. The majority of the respondents were degrees and higher national diplomas graduates 43.01%. More information on respondents' background and construction organisations profile is as shown in table 1.

Table 1: Profile of the respondents and organisations

• • • • • • • • • • • • • • • • • • • •	Frequency	Percentage
Gender of the respondents		
Male	109	58.60
Female	77	41.40
Total	186	100

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Age of the respondent		
20 -29	43	23.11
30 - 39	67	36.02
40 - 49	56	30.11
Above 50	20	10.76
Total	186	100
Type of organisation		
Client	74	39.80
Contractor	65	35.00
Consultant	45	24.20
Others	2	1
Total	186	100
Year of organisation in practise		
1 - 5	36	19.36
6 - 10	45	24.19
11 - 20	54	29.03
20 - 30	34	18.28
above 30	17	9.14
Total	186	100
Staff strength		
0 - 50	23	12.37
51 - 100	36	19.40
101 - 200	37	19.89
201 - 500	50	26.85
500 and above	40	21.51
Total	186	100
Qualifications of the respondent		
OND	19	10.22
BSC/HND	80	43.01
MSC/MTECH/MBA	67	36.02
PHD	5	2.68
Others	15	8.07
Total	186	100
agaarahara, aurian (2010)		

Researchers' survey (2019).

In the collection of data, the factors were grouped into two categories, internal factors and external factors and internal factors were of two types, contractors and consultant related factors. Table 2 shows internal contractor related factors. The contractor related factors ranged from Poor Planning and control techniques (knowledge management) to Lack of education and training to drive the improvement process(motivation). Knowledge management and Poor financial control on site (Cash flow) were ranked first with mean rank of 3.75, while Lack of training on quality for staff (motivation) and lack of management leadership were closely followed with a mean ranking of 3.73.

This showed that for any construction organisation to perform adequately the management teams need to seriously focus on proper planning, training and leadership competencies. Lack of education and training to drive the improvement process was ranked 10th with an index score of 3.37. Looking at the index scores the difference between the factors ranked 1st and the one ranked 10 was 0.38 not up to 0.5 that shows that all these factors are very important in the performance of construction organisations. This finding is in line with the findings of Ahmad (2017) and Tegan *et al.* (2014) who have identified the factors above as the factors that affect organisational performance in their respective areas of studies.

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Table 2: Internal factors that affect construction organisational performance (contractor related factors)

Contractor Related Factors		Rank
Poor Planning and control techniques (knowledge management)	3.75	1 st
Poor financial control on site (Cash flow)	3.75	1 st
Lack of training on quality for staff (motivation)	3.73	3 rd
Lack of Management leadership	3.73	3 rd
Lack of management commitment to continual quality	3.73	5 th
improvement	3.73	
Organization culture	3.69	6 th
High Level of competition	3.67	7^{th}
High number of competitors	3.65	8 th
Resource wastage on site	3.54	9 th
Lack of previous experience of contractor	3.44	10 th
Lack of technical and professional expertise and resources to	3.40	11 th
perform task	3.40	
Lack of education and training to drive the improvement process	3.37	12 th

Researcher analysis (2019)

In Table 3 which shows consultant related factors, Fraudulent practices and kickbacks were ranked 1st with mean index score of 4.75 while Inefficient team work among stakeholders was ranked 10th with a mean index score of 3.87. The mean index scores were also close to each other like contractor related factors. This also shows that all factors are not to be neglected, this was as recommended by Mathew *et al.* (2013).

Table 3: Internal factors affecting construction organisational performance (consultant related)

Consultant Related Factors	MIS	Rank
Fraudulent practices and kickbacks	4.75	1 st
Inadequate project team capability	4.38	2^{nd}
Poor Information and communication channels	4.25	3 rd
Inadequate Early and continual client/consultant consultation by	4.19	4 th
contractor		
Project managers competence / experience	4.10	5 th
Lack of On-Site project manager/ supervisor/ clerk of works	4.06	6^{th}
Lack of employee commitment and understanding	4.04	7^{th}
Lack of coordination between designers and contractors	3.98	8^{th}
Poor Monitoring and feedback	3.88	9 th
Inefficient team work among stakeholders	3.87	10 th

Researcher analysis (2019)

Table 4 shows the last category of factors which is external factors. These factors were ranked from 1st to 11th. Bad governance was ranked 1st with mean index score of 4.38 while Irregular economic decision by government was ranked 2nd with mean index scores of 4.10. Client power was ranked 11th with mean index scores of 3.37. This was in line with the finding of Gambo *et al.* (2017) that emphasised on the issue of bad governance and the significant effect on organisational performance.

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Table 4: External factors affecting construction organisational performance

EXTERNAL FACTORS	MIS	RANK
Bad governance	4.38	1st
Irregular economic decision by government	4.10	2nd
International relations	4.06	3rd
Macro-economic conditions	3.83	4th
Political conditions/ Political unrest	3.75	5th
Nature of construction environments	3.75	5th
Socio-cultural conditions	3.74	6th
Legal condition	3.73	7th
Intense rivalry between companies	3.65	8th
New entrants to the market	3.63	9th
Supply power	3.44	10th
Client power	3.37	11th

Researcher analysis (2019)

CONCLUSION AND RECOMMENDATIONS

The responsibility of achieving success in the implementation of a construction project largely depends on the organisation's performance. However, it has become a global trend that organisations are not performing to expectations of the clients that they serve and indeed many construction organisations have failed to performance adequately due to one factor or the other. Poor Planning and control techniques (knowledge management), Bad governance, and Fraudulent practices were the factors ranked highest in the analysis above.

From the output of the results, construction organisations in Abuja should focus on knowledge management, cash flows, governance and economic policies, in order to achieve better construction organisational performance. Also the study recommends focus on these factors by all the stakeholders so as to achieve a desired performance for construction organisations in Abuja Nigeria. Also adequate instruments must be put in place by government so as to fight corruption and kickbacks in construction industry.

REFERENCE

- Ahmad, A. A. (2017) Factors affecting the organizational performance of manufacturing firms International Journal of Engineering Business Management 9, pp. 1–9. DOI:10.1177/1847979017712628
- Babalola I. H., Oluwatuyi O. E., Akinloye L., & Aiyewalehinmi E. (2015) Factors Influencing The Performance of Construction Projects In Akure, Nigeria International Journal Of Civil Engineering, Construction And Estate Management 3(4), Pp. 57-67. (www.eajournals.org).
- Bakotić, D. (2016) Relationship between job satisfaction and organisational performance, Economic Research-Ekonomska Istraživanja, 29 (1), pp. 118-130, DOI:10.1080/1331677X.2016.1163946.
- Ezeh, M. E. (2013) Public procurement reform strategies: Achieving effective and sustainable outcomes. Paper presented at the CIPS Pan Africa Conference. Federation of Construction Industry (FOCI) (2012): Directory of Firms; www.focinigeria.com February, 2012.
- Gambo, N. & Said I. (2014) A conceptual framework for improving cost and building contractor performances in developing countries. Paper presented at the 7th international real estate research symposium (IRERS) 2014. National institute of valuation (INSPEN) Selangor, Malaysia.

- Glenn, E. (2013). How does the market use citation data? The hirsch index in economics. American Economic Journal: Applied Economics 5(3), pp. 63-90. DOI:10.1257/App5.3.6.3.
- Horta, I.M., Camanho, A.S., Johnes, J. and Johnes, G. (2013). Performance trends in the construction industry worldwide: an overview of the turn of the century, Journal of Productivity Analysis, 39(1), pp. 89–99.
- Matthew, K. Patrick, K., and Denise K. (2013) Effects of fraudulent procurement practice on public procurement performances. International Journal of Business and Behavioural Science 3(1), pp. 17-27
- Moullin, M. (2017) Improving and evaluating performance with the Public Sector Scorecard, International Journal of Productivity & Performance Management, 66(4), pp. 442-458.
- NBS. (2018) National Bureau of Statistics Annual Abstract of Statistics Abuja: NBS retrieved from www.nigerianstatistics.gov.ng. Retrieved on 20/11/19.
- NESG (2018) Growing an Inclusive Economy: Job Creation and Nigeria's Future, Nigeria Economic Summit Group & Development Research. www.nesgroup.org. Retrieved on 20/11/19.
- Pekkola, S., Saunila, M. and Rantanen, H. (2016) Performance measurement system implementation in a turbulent operating environment, International Journal of Productivity & Performance Management, 65(7), 947-958.
- Ryan, A. (2018) Critical realism, performance measurement and management: addressing challenges for knowledge creation. Management Research Review, 14(3), pp. 78-89. http://doi.org/10.1108/MRR-05-2018-0202.
- Sigalas, C. (2015). Empirical investigation of balanced scorecard's theoretical underpinnings, Journal of Accounting & Organisational Change, 11(4), pp. 546 572.
- Silvi, R., Bartolini, M., Raffoni, A. and Visani, F. (2015) Practice of strategic performance measurement systems, International Journal of Productivity & Performance Management, 64(2), pp. 194 227.
- Tengan C., Anzagira L. F., Kissi E, Balaara S., and Anzagira C. A. (2014). Factors Affecting Quality Performance of Construction Firms in Ghana: Evidence from Small Scale Contractors Civil and Environmental Research www.iiste.org ISSN 2224-5790 6(5), pp. 18 -23.
- Tripathi, K. K., and Jha, K. N. (2017) Determining success factors for a construction organisation: a structural equation modelling approach. Journal of Management in Engineering, 34(1), p.04017050
- Yaghoobi, T. and Haddadi, F. (2016) Organisational performance measurement by a framework integrating BSC and AHP, International Journal of Productivity & Performance Management, 65(7), pp. 959-976.
- Yang, H., and Lu, W. (2013) Niche comparisons: towards a new approach for analysing competition and organisational performance in the international construction market. Construction Management and Economics, 31(4), pp. 307-321.
- Yu, I., Kim, K., Jung, Y., and Chin, S. (2017) Comparable performance measurement system for construction companies, Journal of Management in Engineering, 23(3), pp. 131–139.
- Yuliansyah, Y. Gurd, B. and Mohamed, N. (2017) The significant of business strategy in improving organisational performance, *Humanomics*, 33(1), pp. 56-74.