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Effect of Project Managers Leadership Skills on Building Construction Project Performance in Abuja

Hassan Umar Mohammed[1], Sani Usman Kunya[1], Nuruddeen Usman[1], Aliyu Abubakar[2], Ismaila Isa Suleiman[3]

[1]Department of Building Technology, Faculty of Environmental Technology, Abubakar Tafawa Balewa University, P.M.B 0248, Bauchi State, Nigeria
[2]Department of Estate Management, Faculty of Environmental Sciences, Kaduna State University, P.O. Box 2339, Kaduna State, Nigeria
[3]Department of Building Technology, School of Environmental Technology, Abubakar Tatari Ali Polytechnic, P.M.B 0094 Bauchi State, Nigeria

Abstract:

Leadership is one of the factors that play a significant role in enhancing and retaining the interest and commitment of employees in an organization. The leadership skills determine the level of subordinate participation in decision making and the way an organization is run administratively. Project leadership skills is important because what is required of a project manager is the ability to influence, motivate and organise team members so that they can deliver on project mandate. This study work focused on determining the effect of project managers leadership skills on building construction project performance. About 245 Project managers of building construction firms were involved in the study. This number was obtained from the total number of registered construction firms in Abuja. The primary data were collected using questionnaire survey while Simple random sampling technique was employed to obtain the sample size. The result obtained was analysed using descriptive statistical tables, also multiple regression was employed to analyse objective three of the study. The result showed that leadership skills are regarded as very important by the respondents with high means of between 3.82 and 4.25, and that all the managers' leadership skills affect building project performance with communication skills and negotiation skills affecting performance the most as indicated by t-statistics values of 4.176 and -2.721 respectively. The project performance measures were evaluated at the different elements of quality, time and cost. it reveals that the level of building construction performance is very high as indicated by mean value of 4.4041. The research recommended that more and careful attention should be put in place toward enforcement of quality in all building projects.

Keywords: *Project Manager, Leadership skills, Building projects, Construction Performance.*

Introduction

Project is a temporary endeavour designed to produce a unique product, service or result with a defined beginning and end, undertaken to meet unique goals and objectives. Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements (Qin, 2010). Projects serve as a key means for organizations to achieve their strategic

objectives and progress towards their desired strategic direction, they are also keys for the organization to compete in the market, survive and grow (Akanni, Oke and Akpomiemie, 2015). Projects constitute the "building blocks" for the project-based organization. Therefore, ensuring their successful delivery will comfort owners, stakeholders and shareholders and infuse trust into the delivery body (Akanni *et.al*., 2015). Leadership is one of the factors that play a significant role in enhancing and retaining the interest and commitment of employees in organization. Organization, group, institutions developed or even the emerging economies of the world face leadership problems. The success or failure of any organization depends on the leadership skills and the styles (Messick and Krammer, 2018) argued that the degree to which the individual exhibits leadership traits depend not only on his characteristics and personal abilities but also in the characteristic of the situation and the environment in which he finds himself. This is because previous views and studies about leadership show it as personal ability to influence and lead people. Good leadership is essential if a company is to achieve high levels of performance and implement a culture of productivity improvement. The construction industries, especially construction project management, all of whom initiate requirements and collaborate closely with each other (Jung and Mill, 2009).

Since leadership concerns the ability to influence the behaviour of others to closely accord with the desires of the leader it is inevitable that leadership concerns interpersonal relationship in the pursuit of organisational and individual goals and therefore involves skills exercising by the leaders (Liu & Fang, 2006). In management of projects, project leadership is growingly becoming an essential aspect in ensuring project success, and many stakeholders are concerned in achieving various project milestones and deliverables as part of project performance metrics (Ahmed & Vittal, 2017). Leadership skills can be looked at from different perspectives including but not limited to Human Resources (HR) planning, strategic goals development, overall organizational management, project objectives formulation, implementation, and controlling various activities aimed at promoting effective operations for a project, and many other activities (Chaudhry *et.al*, 2012). The relevance of project leadership does not only apply to private projects, but also public projects of all types and magnitude (Baraza, 2018).

Organizational performance can be defined according to Robbins and Coulter (2002) as the accumulated end result of all organizations work processes and activities. Khandekar and Sharma (2006) defined organizational performance as the outcome that indicate or reflect the organization efficiencies or inefficiencies in term of corporate image, competencies and financial performance. Jon & Randy (2009) stated that performance could be reduced to financial terms; overall company performance is implicit in the profit and loss statement give to the board of directors, to the stakeholders, and often to the employees.

Additionally, Ahmed and Vittal (2017) supports the assertion that people competency precisely that of a project manager, is a critical determinant in the overall performance of a project. In general, project leadership skill is important because what is required of a project manager is the ability to influence, motivate and organise team members so that they can deliver on project mandates (Tom, 2013). Project performance (PP) is the extent to which projects are delivered based on the requirements of the clients. These requirements include completing the project within budgeted cost, stipulated time, and agreed quality (Hassan *et.al*., 2022). Project success is mostly and fundamentally determined using time and cost performance criteria (Rahman *et.al*., 2012). However, according to Ogunde *et.al.* (2017) and Auma (2014) have reported poor performance of construction projects across the world. Incidentally, developing countries (including Nigeria) have a higher rate of poor performance of projects than developed countries. It is reported that over 70% and 50% of the construction projects started are likely to exceed the time and cost budgeted with a magnitude of over 50% and 20% respectively (Okweto, 2012).

Project success is the foundation for managing and controlling current projects, and for planning and orienting future projects (Chovichien & Nguyen, 2013). The successful execution of construction projects and keeping them within estimated cost and prescribed schedules depend on the methodology that requires sound engineering judgment. Contrary to the will of owners, contractors, and consultants many projects experience extensive delays and thereby exceed initial time and cost estimates (Alaloul *et.al*., 2016). Traditionally, successful project is analysed on the criteria of performance/quality, budget and time of completion. Two more criteria to determine the successful project were added by (Kerzner, 2017). Firstly, the project would effectively and efficiently plan to utilise the resources and, secondly, it should be accepted by the customer. Society desires that all projects should be successful and has become less tolerant of failure (Kunert & Vonderweth, 2018). Based on the above background, this research work intends to assess the effect of Project managers 'leadership skills on building construction project performance in Abuja.

Literature

Definition and Concept of Leadership

According to Northouse (2014), leadership is a process whereby an individual influence a group of people into achieving a common goal for the overall good of both the individual and the group of people. Leadership is the use of leading strategies to motivate and enhance the employee's potential for growth and inspire them to bring out their best or contribute their best to better the organization (Fry, 2013). As posited by Rosenboom (2011), leadership is the act of influencing subordinates so they will be willing to give their best to achieve organizational goals. Leadership is a gradual and continuous process; it is an ongoing activity with the key aim of accomplishing a set goal for the organization (Jackson, 2011). Heresy & Blanchard (2011) review leadership literature offered their definition of leadership as the process of influencing the activity(s) of a group or an individual towards achieving goals in a particular situation for the organization's overall betterment.

Managers Leadership skills

Motivation skills is the ability to enable a person to achieve their goals. Yet, motivation is a skill that a project manager can apply to ensure that the project team achieves the project's goals in time and on budget (Schmid & Adams, 2008). In the early phase of a sustainable construction project, a project manager needs to motivate the project team in order to achieve sustainability goals. However, the lack of such motivation often leads to conflict, strikes, low productivity, stress, and the failure of the project (Zulch, 2014).

Decision-making and problem-solving skills involve the ability to define and solve problems. Decision making is a process of obtaining a team commitment to, and collective support for, sustainability (Zulch, 2014). For example, in the planning and design stage, there is a need for the project manager to decide the best possible selection of technologies, systems, and subcontractors required for green projects (Hwang & Ng, 2015). Tools and practices are necessary for the project manager to support decision making for managing sustainability criteria in a project. However, problem solving is different from decision making as it is a process of analysing the sustainability criteria and identifying the possible solutions (Pryke & Smyth,2006).

Conflict management skill is the ability to resolve conflict in a positive way. Conflict management has also been identified as one of the important soft skills that influence the achievement of project success by the project managers (Giotis, 2010). Effective conflict management by the project manager can deal with the details of stakeholder relationships thereby preventing the project experiencing delays in addressing issues and restricting the expense of resolving disputes. For example, conflict

within the project team may be unavoidable and project managers must be equipped to manage conflict effectively without affecting project progress (Hwang & Ng, 2015).

Delegation skill involves working with subordinates to establish direction, authority, and responsibility. Without this skill, the ability of a project manager to manage the team and deliver results will be limited (Bruce, 2014). Also, delegation skill is important in making the best use of the project team and the project manager provides the ability to focus on the real situation (Farooqui, 2014). Delegation skill is essential for the project manager in the pre-construction phase, particularly in the planning and design stage, in order to distribute tasks among a qualified project team.

Planning and goal setting skills involve an ability to plan a process and to achieve the desired goals. During the planning and scheduling process, a project manager should consider the impact of green criteria on the overall schedule for the construction works (Glavinich, 2008). The plan of work should be explained to all parties (stakeholders and the project team) such as in the pre-start meeting where all parties need to work together to establish project feasibility so that the project manager can implement a smooth construction schedule (Robichaud & Anantatmula, 2011). Besides that, setting feasible and sustainable priorities during the project will help to establish a framework for all future decision making (Farooqui, 2014).

Teams are defined as groups of people who have skills that are committed to a common purpose and who hold themselves mutually responsible for its achievement (Foley & Macmillan, 2015). Ideally, teamwork is when a group of people work together in a way that is coordinated and mutually supportive to achieve goals. Project managers should also be engaged in team building skills for the success of their project. The results of a survey from Singapore revealed that project managers who are equipped with good team building skills can improve project team cohesiveness as well as enhancing the overall project team performance (Hwang & Ng, 2015).

Negotiation skills involve an ability to discover common ground and reach agreement to settle a matter. Project managers need to apply negotiation skills throughout the project life cycle (Association for Project Management, 2008). For example, a project manager should negotiate among stakeholders and the project team about various aspects of the pre-construction phase such as the scope of the project, deadlines, resources, the team structure that is required to deliver the project, targeted achievements and other things that occur during the project (Foley & Macmillan, 2015).

Construction Project Performance

Tsige (2019) conducts research which assesses the project performance evaluation practices of challenged for construction projects: A case study of mikada Engineering PLC Addis Ababa. The Research utilizes qualitative research approach. Descriptive research design was used to explore and identify project management practices by assessing the project performance evaluation in MIKADA Engineering and Trading PLC. Purposive sampling was used to collect qualitative data from 16 employees that are fully engaged in project works in the organization. A purposive nonprobability sampling technique was also used to sample the population. The study finding reveals that there is misunderstanding on performance evaluation and lack of knowledge. Because of not conducting performance evaluation, the company lost and put on risk. Also, the organization has standards in conducting performance evaluation with an important element that helps to measure and evaluate the project performance. It also shows that project performance evaluation is an important tool for the organization to perform in the industry using different important tools of evaluation methods and to check whether they are in profit or loss.

Methodology

A descriptive and exploratory survey research methodology was used. Since this paper was collected and analyzed numerical data, a quantitative method was thought to be the most suitable. This paper also employed survey research approach, which collects data using questionnaires. The sample frame for this paper is two hundred and forty-five (245) Building Project managers duly registered at building firms in Abuja Nigeria. The study adopted simple random sampling technique. Statistical Package for Social Science (SPSS, version 26) was used for statistical analysis of the data generated from the questionnaire survey. The data achieved using questionnaire survey was a thoroughly screened, analysed and sorted out for analysis depicting the information of responses from the respondents. As the study contained inferential method for the analysis of results.

Finding

Linear regression analysis was used to determine the effect of Project managers leadership skills on building construction performance.

Table1: Model Summary and ANOVA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.614[a]	.468	.423	.27158	10.473	.000[b]

Table 1 shows the model summary and the ANOVA result. The model produced overall R value of 0.684 and R square value of 0.468 with F-statistics of 10.470 which are significant as indicated by p value of 0.000 far below the recommended maximum of 0.05 (Pallant, 2011). This shows that the model predicts about 68.4 percent of the variation in building construction performance measure. In other words, about 68.4 percent changes in building construction performance can be explained by changes in the managers' leadership skills. The model as a whole fit well for the analysis as it produced a strong R value

Table2: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.869	.661		4.340	.000
	AMS	.297	.159	.326	1.869	.064
	ACS	.384	.092	.547	4.176	.000
	ADMS	-.092	.098	-.097	-.939	.350
	APSS	-.085	.081	-.108	-1.049	.296
	ADS	.028	.092	.028	.310	.757
	APGSS	.133	.134	.157	.993	.323
	ANS	-.279	.103	-.087	-2.721	.007
	AKMS	-.047	.065	-.369	-.723	.471
	AFMS	-.212	.145	-.284	-1.466	.145
	ACMS	.148	.086	.195	1.710	.090
	AOPS	.105	.103	.111	1.023	.308

Table 2 shows the individual effect of the independent variables on the dependent variable. The result shows that the managers' leadership skills predictors which has strong significant effect on building construction performance are communication skills and negotiation skills as indicated by t-statistics values of 4.176 and -2.721 respectively all with p-values of 0.000 and 0.007 respectively. Communication skill has the highest effect on building performance measure as indicated by

standardized beta coefficient of 0.547. This is also followed by the negotiation skill having the beta values of -.369.

Conclusion

Building construction project performance is normally evaluated based on five performance evaluation criteria. These criteria are skills, cost, time quality and support. Although all these criteria are indispensable in construction, cost and time are mostly given more attention neglecting the equality important criteria - Skill and Quality. In Nigeria, specifically, construction industry has long been associated with poor quality of building projects. Hence this study is aimed at assessing the effect of Project managers leadership skills on building construction project performance in Abuja.

Accordingly, the research found that, in order of their presence, managers leadership skills, quality, cost, time and satisfaction as the building project performance which were highly present in Abuja constructions work. Building construction project performance can therefore be improved by the well skilled leadership manager on building construction project performance

This research has practical implication to policy makers, construction industry, contractors and clients and contributes to the body of knowledge on construction quality management implementation.

References

Ahmed, R., & Vittal, A. (2017). Empirical study of project manager's leadership competence and project performance. *Engineering Management Journal, 29*(3), 189-205.

Akanni, P. O., Oke, A. E., & Akpomiemie, O. A. (2015). Impact of environmental factors on building project performance in Delta State, Nigeria. *Journal of Housing and Building National Research Center (HBRC Journal), 11*, 91-97.

Auma, E. (2014). Factors affecting the performance of construction projects in Kenya: A survey of low-rise buildings in Nairobi Central Business District. *The International Journal of Business & Management, 2*(12), 1-15.

Alaloul, W. S., Liew, M. S., & Zawawi, N. (2016). Coordination process in construction projects management. In *Proceedings of the 3rd International Conference on Civil, Offshore and Environmental Engineering (ICCOEE 2016)*, Malaysia, 2016 (pp. 149-153). http://dx.doi.org/10.1201/b21942-29

Baraza, A. (2018). Moderating role of project leadership on the influence of complexity on the success of public infrastructural megaprojects. *JKUAT Thesis Repository,* 1-206.

Bruce, S. (2014). *Leadership Handbook*.

Chaudhry, M., Nawaz, K., Rehman, A., & Wendy, K. (2012). The impact of leadership on project performance. *Industrial Engineering Letters, 2*(2), 19-31.

Chovichien, V., & Nguyen, T. A. (2013). List of indicators and criteria for evaluating construction project success and their weight assignment. In *Proceedings of the 4th International Conference on Engineering, Project, and Production Management (EPPM2013)* (pp. 130-150).

Farooqui, R. U. (2014). An exploratory study probing into the factors causing safety non-performance in the Pakistani construction industry. *45th IEP Convention*, 1-12.

Fry, I. W. (2013). Towards a theory of spiritual leadership. *The Leadership Quarterly, 14,* 693-727.

Foley, J., & Macmillan, S. (2015). Patterns of interactions in construction team meetings. *Co. Design, 1*(1), 21-37.

Giotis, T. C. (2010). Leadership through conflict: Grow and advance project teams! Paper presented at *PMI® Global Congress 2010 EMEA*, Milan, Italy. Newtown Square, PA: Project Management Institute.

Glavinich, T. E. (2008). *Contractor's guide to green building construction.* New Jersey: John Wiley & Sons.

Hassan, B., Yusuf, A. W., Usman, H., & Ibrahim, Y. (2022). The influence of construction project team effectiveness in higher institutions' building projects: A case from Nigeria. *International Journal of Real Estate Studies, 16*(1), 37-50.

Hersey, P., & Blanchard, K. (2011). *Management of organizational behavior: Utilizing human resources.* Prentice-Hall, Inc.

Hwang, B. G., & Ng, W. J. (2015). Project management knowledge and skills for green construction: Overcoming challenges. *International Journal of Project Management, 31*(2), 272-284.

Jackson, T. (2011). *Cross-cultural management.* Oxford: Butterworth-Heinemann.

Jon, M., & Randy, L. D. (2009). *Human resource development* (5th ed.). South Western: USAnd Management.

Jung, Y., & Mills, T. (2009). Learning leadership skills from professionals in the construction industry. In *The 3rd International Conference on Construction Engineering.*

Kerzner, H. (2017). *Project management: A systems approach to planning, scheduling, and controlling.* John Wiley & Sons.

Khanderkar, A., & Sharna, A. (2006). Organizational learning and performance: Understanding the Indian scenario in the present global context. *48*(8/9), 682-692.

Kunert, S., & VonderWeth, R. (2018). Failure in projects. In *Strategies in failure management* (pp. 47-66). Springer, Cham.

Liu, A. M. M., & Fang, Z. (2006). A power-based leadership approach to project management. *Construction Management and Economics, 24*(5), 497-507.

Messick, D. M., & Kramer, R. M. (2018). *The psychology of leadership: New perspectives and research.* Lawrence Erlbaum Associates, Publishers New Jersey.

Northouse, P. (2014). *Leadership theory and practice.* Thousand Oaks: Sage Publications Inc.

Olaolu, O., Ogunde, A. O., Afolabi, A., Owolabi, J., & Ojelabi, R. (2017). Challenges confronting construction project management systems for sustainable construction in developing countries: Professionals' perspectives (a case study of Nigeria). *Journal of Building Performance, 8*(1), 1-11.

Okweto, A. N. (2012). An assessment of the organization structure and leadership effects on construction project performance in Kenya: A case study of public building project within Nairobi. *Master of Arts in Construction Management, Department of Real Estate and Construction Management, University of Nairobi.*

Pallant, J. (2011). *SPSS survival manual: A step by step guide to data analysis using SPSS.* (4th ed.). Allen & Unwin, Australia.

PMBOK. (2008). *A guide to project management body of knowledge* (4th ed.). USA: Project Management Institute.

Pryke, S., & Smyth, H. (2006). *The management of complex projects: A relationship approach.* Oxford: Blackwell.

Qin, X. (2010). *Project management and project action plan. Dialogue for incentive higher education strategies.*

Rahman, I. A., Memon, A. H., Nagapan, S., Latif, Q. B. A. I., & Azis, A. A. A. (2012, December 3-4). Time and cost performance of construction projects in southern and central regions of Peninsular Malaysia. Paper presented at the 2012 *IEEE Colloquium on Humanities, Science & Engineering Research (CHUSER 2012)*, Kota Kinabalu, Malaysia.

Robbins, S. P., & Coulter, M. (2002). *Management* (7th ed.). Pearson Education Inc., New Jersey.

Robichaud, L. B., & Anantatmula, V. S. (2011). Project management practices for sustainable construction. *Journal of Management in Engineering, 27*(1), 48-57.

Schmid, B., & Adams, J. (2008). Motivation in project management: The project manager's perspective. *Project Management Journal, 39*(2), 60–71.

Tom, K. (2013). *The project management tool kit: 100 tips and techniques for getting the job done right* (3rd ed.). AMACOM Books.

Tsige, A. (2019). Assessing project performance evaluation practices of challenges for construction projects. Case study on Mikada Engineering Plc. *St. Mary's University School of Graduate Studies, School of Graduate Studies, Faculty of Business, M. A Thesis.*

Zulch, B. G. (2014). Communication skills impact on sustainable and green project management. *Proceedings of the World Sustainable Building (SB14) Conference,* 5, 676-682.