

Article

Flawed Institutional Structures: Project Managers Underutilized in Nigeria's Construction Industry

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Abstract: Many studies have been conducted on the poor performance of the construction industry. Nigeria's construction industry has been linked to project delays and cost overruns, leading to many abandoned construction projects throughout the country. These issues are largely attributed to inadequate project management practices and the underutilization of project managers. To address these challenges, an institutional analysis was conducted to examine the factors, within the institutional framework of the Nigerian construction industry, that hinder the effective utilization of project managers and the implementation of project management practices. Data were collected from the previous literature and were supported by data collected through semi-structured interviews in Nigeria. The collected data were coded into a four-level framework for institutional analysis. This method was employed to analyze the interrelationships between the identified embedded factors, institutional laws and regulations, and construction organizations, and to understand how their influence results in the underutilization of project managers. Deviation analysis was conducted as an additional method to categorize the impacts of the embedded factors at each institutional level and to determine how these impacts contribute to the underutilization of project managers in the Nigerian construction industry (NCI). It was found that the system of the underutilization of project managers consists of two subsystems: underutilization and lowering commitment. For the former subsystem, corruption, political influence, religious and tribal discrimination, and organizational culture were found to adversely influence the institutional structure of the construction industry in Nigeria. These factors weaken the governance mechanisms within the industry, leading project managers to prioritize corrupt practices over project needs. The ineffectiveness of existing laws and regulations exacerbates the situation, supporting unfair working conditions and contributing to the underperformance of project managers. This result leads to development at the top of the latter subsystem, with minimal incentives and limited opportunities for career growth within construction organizations. The findings hold significant potential for addressing systemic issues in the Nigerian construction industry, particularly the underutilization of project managers and organizational support measures to improve project management practices and mitigate the adverse effects of corruption.

Keywords: Nigerian construction industry; poor performance; project manager underutilization; project management; institutional analysis; institutional structure; embedded factors; motivation



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1. Introduction

Although the Nigerian economy is the largest in Africa, it remains a low-income country transitioning toward the middle-income class, signifying the potential for substantial growth and development. Infrastructure development in the construction industry is crucial to Nigeria's growth and development. The Nigerian construction industry (NCI) has been considered a key figure in the nation's economy due to its domino effect on other industries through the provision of infrastructure.

However, despite significant but volatile GDP growth since 1960, driven by activities such as agriculture and oil revenue, Nigeria's investment in infrastructure has been relatively low [1]. For instance, between 2007 and 2017, public spending on infrastructure averaged only 3.6% of GDP, below the African average of 4.3% [2]. Consequently, the Nigerian construction industry has contributed less to both infrastructure development and GDP [3]. The Nigeria Country Commercial Guide [4] reported that Nigeria has a relatively high infrastructure shortage, with the total value of infrastructure in the country accounting for approximately 30% of its GDP. This falls short of the international benchmark of 70% set by the World Bank [4]. Some of the construction infrastructure challenges in the country include insufficient road networks and affordable housing. According to the Nigeria Country Commercial Guide, Nigeria's population is estimated to reach 400 million by 2050, and the current infrastructure may not adequately accommodate this growth, given the country's annual estimated population growth rate of 2.5%. To address this challenge, the government has implemented a 30-year infrastructure plan, known as the National Integrated Infrastructure Master Plan, aimed at increasing the infrastructure stock to 70% of the GDP by 2043 to accommodate the population growth rate [4]. One fundamental way of overcoming the low and declining input of Nigeria's construction sector to the GDP is the government's massive investment in physical infrastructure for sustainable development [5].

1.1. Poor Performance of Nigeria's Construction Industry

Nigeria's construction industry (NCI) is one of the critical sectors that drives economic growth and development. Unfortunately, the industry has been marked by low productivity due to poor performance in project delivery. This problem has been linked to project delays and cost overruns [1,6,7]. Isyaku et al. [8] defined a construction project delay as an action or condition that results in completing the project a time later than agreed upon in the contract. Cost overrun in a project is defined as the difference between the actual cost incurred during the project and the cost limit set for the project [9]. According to Mamman et al. and Sharafadeen et al. [10,11], the inability to complete projects within the timeframe and stipulated budget is a major problem in the industry. Delays and cost overruns have constituted the major criticisms of project delivery. In a study conducted by Ameh and Ogundare [12] on the effect of delays in the construction industry, the results revealed that 70% of construction projects in Nigeria experienced delays in their execution. Bajere et al. [13] conducted an evaluation of delay factors on project completion time, finding that, out of 196 sampled projects, 190 experienced an average time overrun of 485.75%. Mamman et al. [14] investigated the completion cost of public sector construction projects, and the results revealed that 76.5% of the selected sample experienced an average cost overrun of 43.3%.

These challenges of delays and cost overruns in the industry have led to hundreds of disseminated abandonments of construction projects throughout the country. According to the Nigeria Institute of Quantity Survey [6], there has been a significant increase in abandoned projects over the past three decades, with the number of abandoned projects reaching 56,000, and this issue has been primarily attributed to cost-related factors. Ikechukwu et al. [15] argued that the present state of the Nigerian construction industry falls short of meeting international quality standards and performance expectations.

1.2. Underutilization of Project Managers: A Major Cause of Poor Performance

Many studies have identified the causes of the poor performance of Nigeria's construction industry in projects. Major factors include a lack of proper project cost analysis, late payments, price fluctuations, exchange rate variations, and delayed supply of materials [7,15]. Among these causes, the utilization of knowledge on project management and the project manager's commitment has been highlighted as a key issue [16]. Projects often run off track, failing to meet milestones and objectives, primarily due to the underutilization of project managers [17]. Lack of project management experience as well as improper

planning, poor site management, and lack of motivational support were identified as causes of project delay in the NCI [10,18,19]. Many projects lack proper planning, scheduling, and effective control, often due to the absence of contributions from project managers trained in project management [20]. Dalibi [21] emphasized that the inadequate use of project management professionals and the engagement of non-project managers in Nigerian construction projects significantly contribute to project delays and cost overruns. The lack of project management experts and the awarding of projects to incompetent contractors contribute to the poor performance of the NCI.

1.3. Research Aim

The success of Nigeria's construction industry can be aligned with the use of project management systems. The underutilization of project managers is caused by multiple factors that are significantly influenced by institutions. These reasons have been discussed separately by different authors. Usman et al. [22] state the importance of laws and regulations and affirm that organizations cannot function appropriately unless the laws and regulations are active and enforced. The operations of construction organizations are governed and regulated by laws and industry regulations. Adeleke et al. [23] emphasized the significance of laws and regulations throughout all stages of construction projects, from pre-project to post-project activities. Furthermore, Ismaila et al. [24] identified corruption in the industry as the underlying cause of poor-quality materials, delays in securing government permits, and poor project management, resulting in inadequate planning and insufficient monitoring and control of projects. Ogunde et al. [25] identified changes in authority, corruption, and organizational structure as contributing factors to project failure, emphasizing the lack of effective project management as crucial in the industry. Kasimu and Nweze [26,27] highlighted the negative impact of political and religious factors on contracts and employment within the industry, which leads to the awarding of contracts to incompetent contractors.

There is extensive literature on the challenges facing the Nigerian construction industry. Nevertheless, there has been no comprehensive research on the causes of the underutilization of project managers in Nigerian construction organizations. Multiple factors influence each other and cause the underutilization problem. In the previous literature, however, their interactions have not been fully investigated. This research aims to conduct an institutional analysis to identify causes of project manager underutilization in the Nigerian construction industry (NCI) and propose potential solution directions. Institutional analysis is selected because it has the capacity to incorporate embeddedness, such as that of corruption and religion, laws and regulations, governance, and allocation of resources, and to identify the interrelationships of these embedded factors. This study seeks to investigate the root causes of this underutilization and its impact on project performance, aiming to provide insights that can inform strategies for improving the efficiency and effectiveness of construction project management.

The rest of the paper structure is as follows. Section 2 discusses construction industry performance, the objectives of project management, the roles and importance of project managers in construction, and underutilization of project managers, understanding the flawed institutional structure that enables underutilization of project managers, and other factors contributing to underutilization of project managers in Nigeria using case study and empirical evidence. Section 3 describes the parameters of the study, sampling techniques, and method of data collection and analysis. Section 4 presents the institutional analysis of the data, findings, and main results, factors affecting the utilization of project managers, institutional factors affecting construction organizations and project managers, and a summary of the findings. Section 5 discusses the empirical findings on the direction of the subsystem for higher performance of project managers and the direction for changing the underperformance structure. Section 6 includes the conclusion of the paper, suggestions, and limitations.

2. Literature Review

2.1. Industry Performance

The construction industry has been considered to have low productivity across nations of the world due to poor performance being recorded in the sector [28]. This poor performance has been attributed to a lack of effective utilization of workers in the sector [29,30]. In recent years, due to the high competitiveness of the current global business environment in the construction industry, several research studies have focused on how to improve construction organizations' performance. The World Economic Forum's 2011–2012 Global Competitiveness Report highlighted Africa as having the second-lowest construction productivity, indicating a significant challenge in the region's efficiency in this sector. This trend is reflected in the Nigerian construction industry, which has a consistent history of project failures characterized by delays and cost overruns that affect various types of projects. Previous studies have suggested the use of motivational support, including financial rewards, good supervision, fair salaries, and job security and bonuses to enhance the overall performance of employees in the construction industry [29]. Despite significant efforts to address the poor performance of NCI using motivation factors, the industry continues to struggle with significant issues, particularly concerning project delays and cost overruns, often resulting from disruptions by contractor organizations or external factors. Thus, it is essential to identify the precise causes of delays and cost overruns in NCI to establish a mechanism to minimize and prevent failures in construction projects.

2.2. Project Management and Project Manager

Project management has been defined in various ways by different authors, each offering distinct perspectives. The Project Management Body of Knowledge [31] defines project management as the application of knowledge, skills, tools, and techniques to project activities to meet or exceed stakeholders' needs and expectations on a project. According to the Project Management Institute [32], meeting and surpassing stakeholders' needs and expectations entails coordinating time, cost, and quality. This involves addressing the expectations and identifying the requirements (needs) of stakeholders, as well as the unidentified requirements (expectations). Kerzner [33] described project management as a combination of art and science. It involves the art of accomplishing tasks through people within a formally organized group and the science of managing extensive data to plan and control, ensuring a balance between project duration and cost.

The objectives of project management include the systematic application of management skills and suitable techniques to plan and control all stages of a project [21]. This approach is designed to efficiently plan and control resources, ultimately resulting in the development of a well-designed and competently constructed outcome. This outcome aligns with the client's requirements in terms of function, quality, time, cost budget, and future maintenance. Successful implementation is contingent upon being overseen by a project manager possessing a profound professional understanding of projects, increasing the prospect of staying within cost and time schedules and achieving successful results [17].

2.3. Roles and Importance of Project Managers in Construction

The responsibilities of a project manager within a project are vast, and they cannot afford to be passive in assuming control. This is because the success of a project greatly depends on the contributions and actions of the project manager. Hence, it is essential to improve the utilization of project managers for effective project management practices to enhance the performance of construction organizations in Nigeria.

Ayo [34] argued that project managers (PMRs) need to possess certain qualities, including:

- (a) The project manager should have a solid understanding of suitable project management techniques and practices.
- (b) A questioning attitude is crucial for a project manager; they cannot always accept progress information or promises at face value. They should ask for supporting information or evidence.

- (c) Being an active and mobile individual is essential for a project manager because effective project management involves more than just deskwork.
- (d) A project manager should possess strong organizational skills, which include effectively managing meetings.
- (e) A project manager should excel at motivating individuals, both within the organization and externally.
- (f) Having perceptive ability is crucial for identifying and addressing potential problems before they escalate.
- (g) A project manager should excel in communication, including the capacity to collaborate effectively with all project participants.

Project managers' responsibilities in construction projects are crucial in ensuring the success of the projects. These professionals provide efficient project planning, breaking down complex tasks into manageable sizes, and creating comprehensive project schedules [17]. Project managers have the professional ability to organize resources effectively, encourage team members, and ensure the utilization of materials throughout the project lifecycle. This organizing approach minimizes waste, delays, and unnecessary expenses, thus, maximizing the efficiency of project procedures [35]. Project managers identify and manage risks and devise proactive strategies to mitigate them through the implementation of a risk management approach [16]. Application of risk management strategies helps in safeguarding project timeline and budget.

Additionally, project managers play a key role in stakeholder engagement, fostering effective communication and collaboration among project team members, clients, contractors, and regulatory authorities [33]. This helps to ensure that all stakeholders are aligned with project objectives and informed about project progress. Project managers prioritize quality assurance, ensuring that construction activities meet industry standards and regulatory requirements through the implementation of quality control measures and regular inspections to identify any deviation [13]. This helps to minimize rework and ensures high-quality project outcomes. Moreover, project managers possess the skills of problem solving and decision-making in addressing challenges and adapting plans necessary to keep the project on track [23]. The project manager's ability to anticipate and respond to changes contributes to the project's success.

Construction organizations require experienced project managers and project teams to deliver projects successfully [34]. According to Mawdesley and Micheal [36], the successful completion of a project demands regular planning and control. Effective project management in construction requires the efficient use of labor, materials, and equipment. Construction projects demand specific knowledge, skills, and expertise from qualified professionals who have the capacity to prioritize project cost control. Project managers' responsibilities comprise planning, monitoring, evaluative review, reporting, and providing technical assistance activities to identify challenges and prepare and recommend solutions at the earliest stage [37]. Giri [35] stated that increasing project performance, which is increasingly complex in nature, depends on the essential utilization of those important managerial and technical skills of the project manager at every project stage. Planning is critical for project success, as it enables project managers to proactively identify and address potential risks, allocate resources efficiently, and closely monitor project progress [33]. It is essential for a project manager to set clear and achievable project objectives.

The project execution stage involves the implementation of project details in the project charter. At this stage, project managers must manage resources efficiently, maintain effective communication with the project team and relevant stakeholders, and monitor project progress to ensure that the project is on track. The high intensity of project activities makes it the most complex stage in the project lifecycle. According to Abisuga [38], utilizing project managers during the project execution stage facilitates smooth progress through effective communication, early error identification, and effective implementation of control measures. The role of the project manager at this stage is to create a cordial working environment among the project team, workers, and relevant stakeholders, and to encourage

the workers. The post-project stage involves project closure, which signifies the completion of the project. Project activities are checked to ensure that all deliverables and project objectives are met before the formal closing of the project and the handover.

2.4. Underutilization of Project Managers

The reality is different from the ideal in Nigeria's construction industry. Inadequate planning, ineffective communication, monitoring, and control of projects have been attributed to the underutilization of project managers [17]. Even in planned projects, the use of appropriate scheduling techniques for logical activity sequencing and effective execution is rarely observed.

Some studies have discussed the reasons for the underutilization of project managers. Nwachukwu and Emoh [39] contend that there is limited awareness regarding the significance of project management techniques and skills and that the utilization of expertise in project management remains relatively low within the NCI. The poor performance of NCI has asserted the crucial importance of project management skills, which have been a result of passive participation from project managers. Anyanwu [17] argued that, when contractors and project teams fail to prioritize the scheduling of project activities, it can result in scope creep and ultimately lead to project failure in the industry. Some contractors prioritize project funding over hiring competent professionals, resulting in a neglect of competency that affects the intended standards and specifications of the project [16].

Olateju et al. [40], along with Nwachukwu and Emoh [39], emphasized that insufficient project management knowledge and limited professional training in project management pose significant impediments to the successful implementation of project management procedures in the NCI. Lack of project management skills shows across the project life cycle and affects project success at the pre-project stage, execution stage, and post-project stage, according to Nwachukwu and Emoh [39]. The absence of adequate project management has resulted in delays, cost overruns, and resource misallocation and increases project risks of failure in NCI [19]. The importance and utilization of project management procedures have been emphasized by many researchers. According to Nweze [27], many projects in Nigeria have failed due to poor project management and a lack of qualified project managers. It was found, in an interview, that a significant number of project managers acquire their skills through hands-on experience while working or from non-accredited project management institutions. This situation has led to related construction professionals assuming the role of project manager without the necessary knowledge and skills [39].

2.5. Other Factors Contributing to Underutilization of Project Managers in Nigeria

Corruption and political influence for personal gain have been identified as significant contributors to the lack of project management in the industry. These factors have adverse effects on project costs and resource allocation, leading project managers to prioritize personal gains over contract ethics, project management practices, and project needs [16,24]. Additionally, religious and tribal discrimination contribute to the underutilization of project managers in the Nigerian construction industry. According to Ndife [41], the infiltration of such discrimination undermines project team cohesion and communication, ultimately leading to competency issues within organizations and project failures [42]. Furthermore, inadequate recognition, lack of incentives, and insufficient training compound the challenge. Nweze [27] emphasizes how unfair working conditions, including low salaries and limited career growth opportunities, reduce project managers' commitment to projects. These institutional and systematic issues not only hinder effective project management but also contribute to project failures and suboptimal outcomes in the Nigerian construction sector. Addressing these challenges requires comprehensive policy and organizational reforms aimed at promoting transparency, competency, inclusivity, merit-based recognition, and equitable opportunities for project managers.

2.6. Understanding Flawed Institutional Structure

The ineffectiveness of employment and work law contributes to the underutilization of project managers in the NCI by failing to provide adequate protection, rights, and support for project management professionals [7]. This inadequacy undermines their job security and overall commitment to projects, leading to diminished performance and reduced effectiveness in their roles. Ndife [41] stated that this weak law causes biased employment and unequal treatment in the workplace due to religious and tribal discrimination. The adverse effect of the ineffectiveness of contract law on the contract bidding process due to corruption and the political influence for personal gain causes the underutilization of project managers. According to Ogunde et al. [25], corrupt practices affect project managers' decision-making on the projects and lead to project quality compromises. This lack of legal framework undermines their authority, hinders decision-making, and reduces their ability to drive projects to completion efficiently. In addition, the instability of government policy and regulation compounds the underutilization of project managers in NCI by creating an unpredictable operating environment. The frequent changes in policies and regulations in the industry lead to inconsistencies in project requirements and affect project planning [22]. This situation undermines project managers' ability to plan effectively and navigate regulatory compliance, and results in project managers struggling to adapt to constant new regulations.

2.7. Case Study and Empirical Evidence

Ezeokoli et al. [19] investigated contemporary construction practices in the southeast region of Nigeria. Their study revealed that poor project planning, inadequate quality control, and corruption issues are significant challenges faced by construction projects in this area. These identified factors have been shown to contribute to the underutilization of project managers, leading to decreased operational effectiveness. Consequently, projects without competent project management practices are more susceptible to experiencing delays and cost overruns. In a similar research, Adagba et al. [43] analyzed the factors contributing to the failures and abandonment of construction projects in Kaduna state, Nigeria. Their findings highlighted corruption as a prevalent issue in kickback factors, manifesting in forms such as bribery, which undermines the regulatory system governing contract bidding. Additionally, changes in government administration were identified as leading to the implementation of new policies that disrupt ongoing projects, causing underutilization of project managers. Political influence further exacerbates project management challenges by interfering with project administration and management, thereby affecting project demands.

Moreover, insufficient construction professionals in project management roles were found to contribute significantly to project delays due to inadequate planning and monitoring. Kasimu and Isah [26] researched contractor factors attributable to delays in construction projects, with improper factors being identified as common factors due to the underutilization of project managers. Issues such as ineffective communication, design errors, lack of motivation, material and equipment shortages, and slow decision-making were identified as prevalent causes of delays in construction projects across Nigeria.

To address the underutilization of project managers in the Nigerian construction industry, implementation of various potential solutions and best practices is not only feasible but also highly effective. Strengthening regulatory frameworks to combat corruption and ensure transparency in contract bidding processes is feasible through legislative reforms and enforcement mechanisms, which have proven effective in other industries. This aligns with Usman et al. [22], who found that developing an honest and ethical institutional framework will help in preventing corruption. Implementing educational programs such as career growth and training to improve the skills and competency of project managers is both feasible and effective, as it can be achieved through partnerships with educational institutions and professional development initiatives. This aligns with Ezeokoli et al. [19], who put forward proposals for the collaboration of government, construction professional

bodies, education institutions, and construction firms to embark on capacity building through training and retraining programs.

Promoting effective communication channels between stakeholders is feasible through the use of modern technology and project management tools, which have been shown to improve collaboration and information sharing. Encouraging collaboration among project participants is feasible through fostering a culture of teamwork and cooperation, which can lead to more efficient project delivery. Implementing performance-based incentives to motivate construction professionals, including project managers, is feasible and effective, as it aligns individual goals with project objectives and rewards desired behaviors. This aligns with recommendations made by Ayodele et al. [7] for government intervention to raise wages and for organizations to provide salaries equal to tasks, while also implementing performance-based incentives fairly to improve commitment and performance. Finally, emphasizing a culture of continuous improvement within the industry is feasible through leadership support and organizational commitment to learning and development, leading to sustained enhancements in project management practices and outcomes. These measures offer practical and impactful ways to address the underutilization of project managers in the Nigerian construction industry.

The underutilization of project managers in the Nigerian construction industry presents significant policy implications, including the ineffectiveness of laws and regulations, unfair working conditions, and inefficient resource allocation. These result in project failures and abandonment and hinder economic growth. To address this issue, legislators, industry stakeholders, and relevant organizational bodies should prioritize strengthening laws and regulatory frameworks to promote transparency and combat corruption, political influence, religious and tribal discrimination, and the organizational culture of unfair employee treatment and lack of motivation. Investing in education and training programs designed for the needs of the construction industry and employee self-actualization is essential to enhance the skills, competency, and self-satisfaction of project managers. Additionally, fostering collaboration and communication among organizations and project managers, implementing performance-based incentives, and encouraging continuous improvement initiatives are vital steps to improve project management practices and outcomes. By addressing the underutilization of project managers through targeted policies and initiatives, Nigeria can unlock the full potential of its construction industry and drive sustainable development.

3. Materials and Methods

This study employed an inductive method, which was conducted through a bottom-up approach. Specifically, an exploratory approach was applied to identify and investigate the institutional factors that influence the utilization of project managers in Nigeria's construction organizations which, as a result, influence project management in Nigeria. From the results of the literature review, it was possible to hypothesize that all influential factors are categorized into four categories: embeddedness, such as custom and religion; institutional environment, such as laws and regulations; governance, such as implementation of laws and regulations; and resource allocation, such as the organization's resource allocation. The factors were coded with institutional analysis using a four-level framework of institutional analysis developed by Williamson [44]. This approach was complemented by theoretical coding, serving as the essential process within a grounded theory methodology [45,46]. These data were collected from the previous literature and were supported by data collected through interviews. Deviation analysis was conducted as an additional analysis to classify the impacts of the embedded factors at each respective institutional level and how the factors' impacts contribute to the underutilization of project managers in the NCI. This analysis was employed to examine the interrelationships between the embedded factors, institutional laws and regulations, and construction organizations. Additionally, it was used to demonstrate how these factors affect project managers' performance and resource allocation within the construction organizations. A similar approach

was adopted by Hurrelmann [47] to identify the factors challenging the European agri-food system when restructuring agricultural production in central and eastern European countries. This analysis provides an understanding of the vicious and spontaneous effects of the embedded factors on the institutional environment, and the performance of construction organizations in Nigeria.

Purposive sampling was used in this study, where participants were selected based on specific criteria relevant to the research objectives. Specifically, semi-structured interviews were conducted with project managers in government construction sectors, private contracting firms, and private consulting firms, where 36 respondents were interviewed. The semi-structured interview was piloted by one lecturer and two construction project managers, each with over 10 years of experience. They emphasized the significance of understanding the tasks assigned to project managers by organizations and the key performance indicators used by these organizations. Face-to-face interviews were conducted with respondents with over 10 years of experience in project management practices. Following recommendations from the pilot semi-structured interview, this minimum threshold of 10 years was selected to ensure the collection of comprehensive data, considering the extensive experience of the respondents. These respondents currently hold significant positions within their respective organizations, as shown in Table 1. Thus, their views were considered to capture the characteristics of each organization. This method helped to provide an in-depth understanding of existing perceptions, practices, and potential areas for improvement.

Table 1. Interview respondents.

Respondents	Number of Respondents	Years of Experience
Executives/Directors	3	20 and above
Senior Project Managers	7	15 to 20
Project Managers	26	10 to 15

The interview was conducted on the federal government construction sectors and major private construction organizations in different regions that handle colossal projects across Nigeria. These interviews aimed to gather empirical data that deepened our understanding of the institutional settings and operations of organizations and how these influence the utilization of project managers. Data were collected for five months to have a comprehensive depth knowledge of the causes of the underutilization of project managers in Nigeria's construction organizations. During the data collection process, there were a few instances when we held meetings with three or four respondents together but, in most cases, the respondents were interviewed individually. This approach deepened our understanding of the causes of underutilization of project managers.

The data were collected from government construction agencies that emerged from the Federal Roads Maintenance Agency (FERMA), Federal Housing Authority (FHA), Nigeria Railway Corporation (NRC), and Federal Airport Authority of Nigeria (FAAN). In addition, project managers (PMRs) working with private contracting firms participated in the interviews. The private sector has the highest number of project managers in the industry because it involves indigenous and foreign contracting organizations. Private contracting firms within the construction industry specialize in commercial construction, industrial construction, infrastructure construction, power construction, and residential construction. Project managers in various private consulting firms, including quantity survey consulting firms, geotech consulting firms, architectural firms, and mechanical and electrical consulting firms, were involved in the interviews. These organizations provide comprehensive guidance and installation on construction projects.

These interviews were conducted predominantly in regions with high rates of government and private investors' projects due to the boom of social and economic activities in the regions. These regions include the southwest, with the largest seaport and airport, making it the center of the economy in Nigeria, and the southeast, which is the business,

crude oil, and technological hub of the country. In addition, regions considered were the south, which is the largest crude oil and natural gas producing region, and Abuja, which is the federal capital territory of Nigeria and falls into the north-central region of the country.

The interview questions employed in this study were formulated based on institutional factors that cause the underutilization of project managers. These questions included analyses regarding perceptions of project management practices within Nigerian construction organizations, exploring both the practices and the involvement of project managers. In addition, the interview process examined the potential motivations provided to project managers to improve their job performance. The specific interview questions were based on questions regarding (1) the project management procedures being practiced in their organizations; (2) possible factors that affect the practices of project management procedures in the industry; (3) the level of project management procedures conducted by project managers during the pre-project stage, execution project stage, and post-project stage of projects; and (4) the motivational support organizations give to project managers, how important the motivations are to them, and how they affect their job performance.

In one of the discussions with four respondents in a meeting regarding possible factors that affect contracts and project management practices in the industry, the main sources of data were political influence and interest, corruption, and inadequate planning and project monitoring. The respondents claimed that the effect of political influence on contract bidding processes and interests forces project managers to ignore project demands to meet political interests. The interviewees claimed that inadequate planning and project monitoring are a result of a lack of project management experience and less commitment from the professionals. The same political influence was mentioned, including corruption, in our meeting with one of the foreign construction companies in the country. Corruption, political interest, and lack of project management practice were constantly mentioned as major causes of project delay and cost overruns [22,27]. Religious and tribal discrimination was mentioned more by respondents from the government sector and indigenous construction organizations. Lack of motivational support, especially surrounding career growth and promotion, was regularly mentioned. At a certain stage of the data collection, we observed a recurrence of responses among the interview participants. We recognized this as indicative of data saturation, where further interviews would likely provide no significant new insights. Therefore, we determined that 36 interviews were adequate to attain data saturation and gain a thorough understanding of the research objectives. The constant reiteration of responses from the interviewees indicates that saturation has been reached [48].

The Nigerian construction industry's institutional structure was organized into the four-level framework and the data were input into the analysis framework: embeddedness, which comprises informal institutions, norms, traditions, and religion; an institutional environment, that consists of the formal rules of the game, laws, constitutional rights, policies, and regulations; governance, which comprises the play of the game and governance structure; resource allocation and employment, which consist of incentive alignment and working conditions. The collected data underwent bottom-up institutional analysis, employing the four-level framework of institutional analysis outlined in Table 2, for a theoretical coding in the grounded theory approach [46]. This approach was taken for constant comparison and comparative analysis of the data from previous studies, and data collected from interviews were theoretically analyzed. At this stage, noting was conducted to document theories by establishing interconnections among embedded factors, institutional environment, and governance structure [48]. Potential risk factors of the embedded factors at each institutional level were identified through deviation analysis. The factors identified were discussed for verification of their contribution to the underutilization of project managers in construction organizations.

Table 2. New institutional economics: four-level framework of institutional analysis by Williamson (2000).

Level of Analysis	Frequency (Years)	Purpose	Method of Analysis
Embeddedness	100 to 1000	Informal institutions, customs, traditions, norms, religion	Social theory
Institutional Environment	10 to 100	Formal rules of the game; judiciary, polity, laws and property rights; constitutions	Economics of property rights, positive political theory
Governance	1 to 10	Play of the game; private ordering, aligning governance structures with transactions	Transaction cost economics
Resource Allocation and Employment	Continuous	Prices and quantities; incentive alignment	Neoclassic economics

In this additional step, we argue that to solve the causes of the underutilization of project managers, the governance structure needs to function correctly to reduce the effect of embedded factors on the institutional environment. This argument is supported by previous research on corruption in the construction industry of Nigeria and its causes and solutions [7]. Hence, addressing the underutilization of project managers in the construction industry requires an improvement in the governance structure to mitigate the influence of embedded factors within the institutional environment. Through the enhancement of the governance structure, such as by implementing effective regulations and policies, the negative impact of factors like corruption, political influence, and religious and tribal discrimination can be reduced. This, in turn, can contribute to improving the performance of the construction industry in Nigeria by promoting transparency, accountability, and efficiency in project management practices.

4. Results

Figure 1 illustrates a four-level social analysis of the Nigerian construction industry (NCI), focusing on how certain embedded factors influence the institutions governing construction organizations. The solid arrows connecting the higher and lower levels signify the enforcement of the factors, while the reverse dashed arrows indicate feedback. Level 1 identified factors including corruption, political influence, company culture, religion, and tribe, which exert negative pressure on Level 2, influencing the governing laws and regulations in the NCI. These informal factors weaken employment and work laws, contract laws, and government policies, thereby affecting construction practices and procedures. These factors negatively affect construction organizations in Level 3, where effective laws and regulations are essential.

This study discovered that the inefficacy of employment and work law, influenced by embedded factors, led to unfair working conditions and discrimination based on religion and tribe against project managers within organizations. The inefficiency of contract law resulting from the negative impact of embedded factors allows government officials and politicians to pursue personal gain. This gives rise to corruption and political pressure during the contract bidding process, affecting project budgets and the organization's employment system. Moreover, the negative factors embedded in the industry contribute to the instability of government policies and regulations, resulting in unwarranted delays in obtaining project permits. These delays influence the costs and timeline of projects, posing challenges to the planning and decision-making processes of project managers. Ineffectiveness in laws and regulations influences how project managers are treated at Level 4, thereby reducing their commitment and motivation.

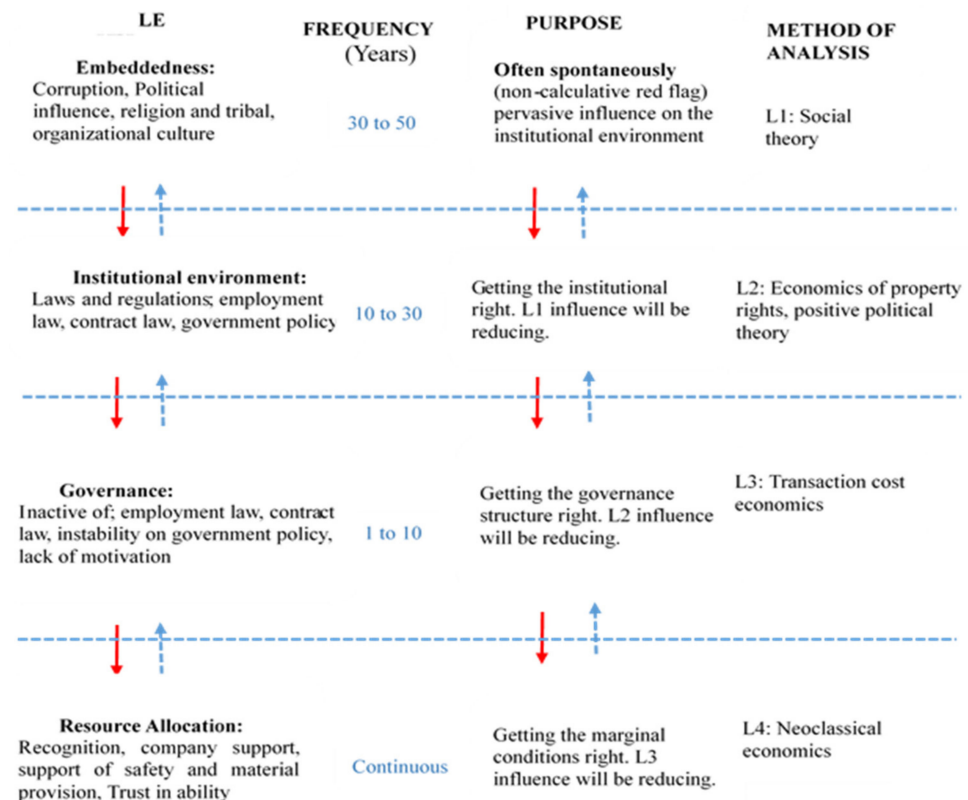


Figure 1. The four levels of institutional analysis of the NCI. Solid arrows (imposes constraints); Dashed arrows (feedback results).

The diagram illustrates that consistent and effective implementation of resource allocation directly to project managers at Level 4 can enhance the utilization and performance of project managers in the NCI. Continually securing the marginal conditions of project managers' rights will mitigate the impact of legal inefficiencies on construction organizations during projects. Additionally, the effectiveness of construction organizations will decrease the influence of embedded factors on the rules of the game [40].

4.1. Embeddedness

At this level of the institutional analysis of the NCI, various informal factors negatively influencing the industry's institutional environment were identified. Corruption, political influence, company culture, religion, and tribe were identified as having a negative influence on construction processes within the industry [27]. The impact of these factors was observed to affect project management practices within construction organizations. The effects of corruption and political pressure for personal gain were discovered to have led to bribery within the industry, especially during contract bidding [25]. This unethical practice has led to the awarding of contracts to incompetent contractors and impacts project budgets, often resulting in compromised project quality and project abandonment. Additionally, tribal and religious factors contribute to an unfavorable working environment characterized by discrimination, conflicts, and biased employment. These embedded factors have been found to not only undermine institutional laws and regulations but also to impede project management within construction organizations, directly affecting the performance of project managers.

4.1.1. Corruption

Corruption within construction organizations undeniably has a significant negative effect on the industry, and it was identified as a major concern affecting construction practices in Nigeria. Ismaila et al. [24] argued that corruption stands out as one of the critical factors contributing to delays in construction projects. This has the potential to result

in disputes and financial losses for both project owners and contractors. The interview respondents mentioned how the influence of these factors alters the competitive landscape of contract bidding and introduces bribery and nepotism. This consistently results in the awarding of contracts to incompetent contractors, who are often the highest bidders in terms of bribery [27]. These illegal activities result in inflated project costs, poor-quality work, project delays, or even project abandonment. The compromise of project quality often leads to costly repairs or reworks that contribute to premature deterioration. This situation places significant pressure on project managers to engage in corrupt practices, ultimately undermining their commitment to project success and ethical project management practices.

4.1.2. Political Influence

Political influence on the construction industry could have several negative impacts that are capable of affecting the industry's institutional environment. In the context of the Nigerian construction industry, it was found that political elites prioritize their personal gain over addressing national concerns and disregard contract law and regulations. This political interference, driven by self-interest, was revealed in an interview as a significant contributor to the failure and abandonment of many projects. According to Obebe et al. [16], organizations often secure contracts not through merit or competitive bidding but due to connections with corrupt officials. This illegal political pressure on construction organizations contributes to decision-making challenges to balance project needs and political demands. This situation potentially compromises resource allocation and compels project managers to prioritize political interests over project objectives.

4.1.3. Religious and Tribal Discrimination

Religious and tribal practices within construction organizations result in many negative challenges that are capable of obstructing organizational objectives. It was found that religion and tribe affiliations lead to discrimination among employees, including project managers, in construction organizations in Nigeria. These challenges were mostly revealed by interview respondents in the government construction sector and private organizations. This creates in-groups and out-groups within the workplace, causes bias in relation to job assignments and promotions, and limits employees' chances to grow within the organization [41,42]. Project managers encounter challenges in team cohesion due to tribal and religious loyalties and divisions. This affects communication, collaboration, and overall project performance, identified as the major reasons for workplace fragmentation, unfair treatment, and undermining the competency of project managers. This situation was commonly seen in government construction agencies and indigenous private construction organizations in the NCI.

4.1.4. Organizational Culture

The working culture within construction organizations has a significant impact on the behavior and expectations of project managers. The interviewees mentioned unfair salaries, insufficient opportunities for career growth, unfair working conditions, and insufficient incentives as organizational practices that influence their commitment and loyalty. According to the feedback, this creates a feeling of being undervalued, resulting in frustration. Consequently, this negatively affects their enthusiasm for work and commitment to the organization's goals. Woo and Soetanto [49] opined that the unsatisfied needs of employees affect their commitment, and thus they stated that employees' needs are their energy-driving factors towards improved performance within the organization. Project managers who do not see a clear path for growth within the organization become disengaged and less committed to their current roles and responsibilities. It was found that Nigeria's economic challenges led to budget constraints that contributed to low salaries, less support for career growth, and fewer incentives. Moreover, the interview results revealed that the high unemployment rate contributes to unfair working conditions in the NCI. Diversion of funds

that could otherwise be allocated to employee benefits due to corruption was identified as contributing to the meager rewards and lack of career growth in the organizations [7].

4.2. Institutional Environment

Institutions can be seen as the mechanism, or “rules of the game”, through which the rules of society function, which can generally be viewed from the perspectives of economics and organizational sociology. Institutions can be classified into formal and informal or regulatory, normative, and cognitive [50]. A formal institution comprises regulatory bodies responsible for creating and enforcing rules and regulations governing various aspects of society or organizations. This includes government agencies, professional associations, and legal bodies that establish the legal framework, including employment and work law, and the policies and regulations under which organizations function.

Informal institutions consist of normative and cognitive institutions. Normative institutions involve social norms, values, and beliefs that guide behavior and shape ethical standards and moral principles within organizations [51]. These include moral responsibilities and cultural or traditional norms influencing practices, such as incentives and social expectations, such as fairness, honesty, and loyalty. Cognitive institutions include common beliefs and ideologies that shape the way individuals think and reason about their environment, such as a belief system about decision-making and the working method of an organization. In the Nigerian construction industry, the institutions involve employment and work law to protect employees’ rights, contract law to protect organizations’ and clients’ rights, and government policies and regulations to provide and enforce principles and guidelines. The definition and enforcement of laws and regulations are important features of the institutional environment [44].

4.2.1. Employment and Work Law

The Nigeria Employment and Work Law plays a vital role in regulating employee–employer relations in Nigeria, including in the construction industry. This law was formally enacted by the Nigeria National Assembly to protect the rights of employees [52]. This law ensures the protection of workers’ rights, including timely wage payments, fair working conditions, and access to benefits such as leave pay and medical schemes. Adherence to this employment law is mandatory for construction organizations in Nigeria. Employment and work laws safeguard employee rights and help avoid operational ambiguities [53]. The law not only protects employee rights, improves working conditions, and contributes to economic and social development but also creates a significant fair, stable, and conducive environment for both employees and employers.

4.2.2. Contract Law

The law plays an essential role in the Nigerian construction industry, protecting the interests of the parties involved in contracts. This was constitutionally instituted by the federal government of Nigeria through the National Council on Public Procurement [54]. The law emphasizes equitable treatment by regulating unjust contract terms. This is associated with regulations that include codes of conduct, anti-corruption measures, transparency requirements, fair competition standards, and equal treatment of bidders. The law mandates ethical conduct in public procurement involving various entities, such as procuring entities, tenderers, suppliers, contractors, and consultants. It strictly prohibits any giving, receiving, or soliciting of anything valuable to influence officials and the practice of fraud, such as misrepresentation, to manipulate the procurement process.

4.2.3. Government Policy and Regulation

Regulation is the imposition of laws or directives by a government or regulatory body through policies, such as guidelines and principles. Its purpose is to address issues or achieve specific goals, such as ensuring compliance with legal standards and protecting public interests [55]. In the NCI, government regulations include policies set by the govern-

ment to supervise and control various aspects of industry activities. The policies are those guidelines or rules formulated and adopted in the industry, such as safety policies, quality assurance policies, ethical policies, sustainability policies, and environmental policies. The aim is to guide decision-making, address challenges, and establish a framework for consistent and effective procedures.

These policies are issued and enforced by regulatory bodies, such as the Environment Impact Assessment Agency (EIA), which evaluates the environmental impacts of projects and ensures adherence to environmental policies. The Quantity Survey Registration Board of Nigeria (QSREN) focuses on financial accountability and efficient resource allocation in projects. The Council of Registered Builders of Nigeria (CORBON) maintains quality standards in materials, accredits contractors, and enforces compliance with industry norms. The Institute of Safety Professionals of Nigeria (ISPON) oversees safety management practices and establishes safety standards for individuals and organizations in the sector. The Ministry of Lands, Housing, and Urban Development (MLHUD) is responsible for providing policy direction and initiating laws that ensure sustainable land management and national standards in all matters concerning lands, housing, and urban development in Nigeria. These regulatory bodies collectively work to maintain standards, accountability, and safety within the NCI.

4.3. Governance

Governance structure refers to the institutional framework in which the integrity of a transaction is decided. It comprises the legal background, the relevant investment, and the application of the described transactions. Williamson [56] described it as a stand where the paradigm of a discrete transaction agreed upon is demonstrated with clear performance to mitigate conflict and realize a mutual gain. Governance structure helps in reshaping incentives, focuses on ex-ante incentive alignment, and promotes the adaptation of principal dimensions and related attributes of industry regulations. In Nigeria, governance is supposed to become the play of the game, in which contracts are demonstrated under laws and regulations. Construction organizations bear the responsibility of implementing and monitoring policies, as well as ensuring that all decisions and actions are in accordance with the laws and regulations of contracts. Contrary to ethical practices, the loss of values, norms, morals, rules, and regulations could result in the poor performance of construction organizations [54]. The effects of the embedded factors have led to undermining the effectiveness of laws and regulations in various construction organizations. Usman et al. [22] claimed that a lack of functioning laws results in unethical practices in the NCI.

4.3.1. Ineffectiveness of Employment and Work Law

The ineffectiveness of employment and work law within an organization can have various consequences, including the absence of standardized employment practices, the potential for conflicting policies, and unfair treatment. These effects are not unique to the Nigerian construction industry. It was found that corruption leads to organizations violating employment and work laws through practices such as bribery to overlook employee health and safety standards, as well as unfair salary structures [7]. The dearth of employment standards contributes to the identified unfair working conditions and job insecurity mentioned in an interview. Moreover, few or no penalties given to organizations that violated the law were discovered to be the result of political connections and influences [22]. These factors contribute to insufficient motivation support existing in organizations. This is because there is no active agency instituted by the government to enforce the law after its establishment.

The weak law was shown to have created discrimination based on religion and tribal affiliation, which caused biased employment decisions and unequal treatment of workers [41], as confirmed in an interview. This makes it easier for employers to exploit project managers by offering inadequate working conditions and unfair treatment. Hence, the situation creates a certain working perception in which trust and commitment between employers and employees are affected. The effectiveness of this law will protect

project managers against discrimination and harassment, minimum wage, work hours, health and safety, leave and benefits, and termination and severance. To sustain rapid economic growth and infrastructure development, there is a need for adequate enforcement mechanisms and management commitment to improve compliance with employment and work laws [57].

4.3.2. Ineffectiveness of Contract Law

The ineffectiveness of contract law often results in parties breaching their legally binding agreements and contractual obligations. In Nigeria's construction industry, corrupt practices result in the ineffectiveness of this law, which affects transparency and fair competition opportunities among organizations during contract bidding. Organizations are being exploited through bribery to get contracts, and these corrupt practices and political connections result in contracts being awarded to unqualified contractors [25]. This situation causes ambiguity and financial implications for projects, such as delays and effects on project budgets and overall financial viability. The impact of these corrupt practices has a negative effect on project timelines and scope, and they compromise project quality. Usman et al. [22] largely attributed these problems to a lack of adherence to procurement processes due to corruption in the system and identified the absence of punishment as the cause of unethical practices. In addition, the ineffectiveness of the law has made it difficult for project managers to manage risks related to non-performance and breach of contracts from sub-contractors and suppliers.

4.3.3. Instability of Government Policy and Regulation

To achieve the desired outcomes, policies are created to address issues and challenges regularly. These policies and regulations include written rules, regulations, processes, and standards that reflect a country's economic, political, social, and cultural position [58]. In Nigeria, the process of obtaining project permits and approvals from government agencies, such as EIA, QSREN, CORBON, MLHUD, and ISPON, was found to be inconsistent due to frequent policy changes with each new administration [22]. This instability was discovered to be a result of corrupt practices and political influences that compromise existing regulations and enforcement for personal gains, which have negative effects on construction projects [59]. This contributes to uncertainties, including delays in project timelines, cost overruns, renegotiation due to regulatory shifts, and lack of safety measures, environmental violations, and contractual disputes. The inconsistency further creates an environment that project managers find challenging in making long-term plans and undertaking decision-making on projects, and they struggle to navigate regulatory compliance. It was discovered in an interview that this uncertainty hinders investor confidence, particularly in public-private partnerships (PPPs), where private organizations and banks collaborate with the Nigerian government on infrastructure development.

4.3.4. Lack of Motivational Support

Integrating neoclassical ideals can restore the governance framework, ensuring rationality, clarity, and enduring effectiveness. The provision of mechanisms of ex-ante incentive alignment and efficient risk-bearing factors could reduce the influence of negative factors on governance [40].

The neoclassical approach revives classical principles and brings rationality. Motivational support for project managers could promote and enhance commitment and loyalty. However, this study discovered that low motivation factors include job training, rewards, and incentives. Therefore, revitalizing the governance structure demands a rational reassessment, re-establishment of order, creation of an enduring framework, and the provision of clear guidelines. Additionally, it entails promoting collaboration, fostering trust, celebrating progress, aligning with core values, reinforcing ethics, advocating for sustainable renewal, and pursuing continuous improvement. By integrating these values, project managers can find purpose, order, and a sense of timelessness in their roles, leading to more effective project management and improved project outcomes.

4.4. Resource Allocation

Resource allocation refers to the process by which an organization distributes available resources among competing users, which is also influenced by the institutional environment. According to Williamson [56], it involves the distribution of resources based on the interplay of market forces and the institutional environment, considering the formal and informal rules that govern economic activities within an organization. It is the responsibility of construction organizations to ensure that workers' rights are upheld, including timely wage payments, fair working conditions, and the provision of motivational support. This study discovered that insufficient motivational support contributes to the underutilization of project managers. Therefore, allocating appropriate motivational support will enhance the commitment and loyalty of project managers and improve organizational performance. Providing clear rules and guidelines for motivational support will help both parties to navigate complex situations that lead to distrust and help organizations choose the most efficient way to allocate support. According to Crossman and Abou-Zaki [60], motivation influences workers' behaviors and determines their commitment, passion, and participation.

4.4.1. Employee Recognition

The appreciation of employees consistently and systematically has a significant effect on how they engage in tasks [61]. The interview respondents emphasized the significance of appreciation through incentives, compliments, and rewards, stating that these factors greatly influence their contributions and personal satisfaction. Recognition of their efforts, especially through job promotions, was identified as a key factor in enhancing commitment, as individuals understand that higher expectations come with new roles. Acknowledgments, such as appreciation and awards from organizations, were mentioned to boost morale and motivate employees, including project managers, to deliver high-quality work. Organizations practicing recognition programs reported that such initiatives motivate their employees, create a sense of job security, and enhance their contributions. Recognizing and appreciating employees through verbal praise, awards, certificates, and promotions positively affects morale, job performance, and overall motivation [62].

4.4.2. Organizational Support

Organizational support is essential for enhancing the competence and performance of workers, including project managers [29]. This support includes key elements, such as job training, involvement in decision-making processes, and the autonomy to make necessary decisions. Creating a work environment that promotes support is vital in construction organizations, where teamwork is integral. Such an environment encourages constructive feedback, facilitates job improvement, and establishes effective communication channels within the organization. The interview respondents emphasized that career development and job training significantly enhanced their contributions to their organizations and promoted their self-actualization. These forms of support are important for project managers in contributing to organizational goals. This aligns with Siti et al. [63], who assert that learning opportunities promote performance. In addition, the respondents highlighted the significance of top management support in their project management roles, emphasizing autonomy and involvement in decision-making. Recognizing the importance of supporting project managers in their careers and responsibilities is essential for organizations aiming to enhance commitment and loyalty among their workforce [19].

4.4.3. Support for Safety and Material Provision

Support for safety and material provision comprises good facilities, the provision of safety apparatuses, and the availability of working materials, which play a significant role in promoting commitment to construction projects. The interview respondents emphasized that such an environment encourages teamwork, collaboration, effective communication, and a healthy work–life balance. The availability of working materials and safety measures was considered significant by project managers in the Nigerian construction industry, with

a high emphasis on safety measures and medical insurance due to the inherent risks of construction projects [64]. This supportive environment not only contributes to the well-being of employees but also enhances creativity, performance, and overall job success, creating a harmonious workplace [65].

4.5. Factors Affecting the Utilization of Project Managers

Table 3 indicates the factors that have negative impacts on construction organizations and project managers in the NCI, which create an institutional environment that hinders effective project management. These factors negatively affect the implementation and enforcement of laws and regulations, contributing to unethical practices, bribery, substandard work, project delays, and cost overruns. The pervasive influence of corruption and political influence distorts transparency and ethical practices during contract bidding, resulting in the awarding of contracts to unqualified contractors. Additionally, the influence of religious and tribal concerns, along with the organizational culture that includes no motivational support, further complicates the institutional environment. These negative effects impact the trust, commitment, and autonomy given to project managers. These factors collectively contribute to the underutilization of project managers and hinder their effectiveness and overall project success.

Table 3. Institutional factors affecting construction organizations and project managers.

Institutional Level	Institutional Factors	Impact of the Factor on Construction Organization	Impact of the Factor on Project Managers
Embeddedness level	Corruption	Bribery during contract bidding, nepotism in awarding contracts, quality compromises, project delays, cost overrun	Pressure to undermine project success, pressure to undermine project management procedures, effect on trust in PMR ability, and professional reputation damage
	Political influence	Encourage corruption, award contracts based on political affiliation, encourage unqualified contractors to get contracts	Effect on PMR decision making, pressure to include a specific individual in a project team, influence on promotion, limit to autonomy, increase in project risk, ineffective resource allocation, limit to career growth
	Religion and tribe	Conflict and division among employees, project delay, cost overrun	Discrimination limits PMR chances to grow within the organization, lack of unity, breakdown of communication and collaboration among the project team, bias in job assignment
	Organizational culture	Discourages innovation and creativity, project delays, cost overruns	Unfair working conditions, no career and skill growth, less commitment, unfair salaries, PMR demoralization
Institutional environment level	Employment and work law	Regulate employee–employer relations, provide organizations with fundamental rights of workers on minimum wage, overtime pay, safe working conditions, equal treatment, equal opportunity employment	Provides a legally binding agreement with roles, compensation, and termination procedures; protects PMR rights on minimum wage, harassment, overtime work, health and safety rights, work benefits, and protection from discrimination
	Contract law	Governs the legally binding agreements between organizations and clients, guides the contract bidding process, prevents corruption and nepotism during bidding, prevents misuse and misapplication of the formation of stages involved	PMR relies on the contract to define the project scope clearly, helps the project manager manage the project budget within the contract limit, allocates risk liability among parties, provides a project-specific period
	Government policy and regulation	Enforces compliance with safety and laws, accredits contractors, establishes standards, approves permits, assesses environmental and safety impacts	Compliance management, identifies and provides necessary permits and approvals, complies with safety and laws, identifies quality standards, risk management
Governance level	Ineffectiveness of employment and work law	Lack of standardized employment practices, unfavorable working conditions, discrimination and harassment, sudden termination of employment, lack of career growth and training programs	Lack of job security, unfair treatment, unfavorable working conditions, unfair wages, discrimination and harassment, demoralization, less commitment
	Ineffectiveness of contract law	Nepotism and exploitation during contract bidding and distortion lead to awarding contracts to unqualified contractors, payment disputes, compromise of work quality	Endangers communication and collaboration with subcontractors and suppliers, creates difficulties in managing risk, employees struggle to understand and communicate the project requirements to the team

Table 3. *Cont.*

Institutional Level	Institutional Factors	Impact of the Factor on Construction Organization	Impact of the Factor on Project Managers
Resource allocation level	Instability of policy and regulation	Frequent policy changes pose risks to project planning, delay permits and approvals, cause budget fluctuation, increase project time and cost, cause contractual disputes, disrupt the supply of materials	Creates uncertainty in project planning, brings the burden of constant monitoring and adaptation, affects project budget, causes delay in the decision-making process, creates risk management difficulties and difficulties in compliance with policy
	Lack of motivation	Lack of innovation and creativity of employees, low productivity of an organization, project delay and cost overrun, ineffective communication	Less commitment to problem-solving and less attention to project details leads to quality compromise, increased stress and frustration, breakdown of communication and collaboration
	Employee recognition	Increases organizational performance, fosters smooth communication with employee, encourages retention of valuable employees	Enhances commitment, encourages continued delivery of high-quality work, creates a sense of job security, enhances job satisfaction, fosters effective collaboration with team and management
	Organizational support	Increases organizational performance, provides a positive reputation for the organization and effective communication channels	Increases commitment and loyalty, promotes performance, provides training and career growth, involvement in decision-making processes, autonomy at work, teamwork, and collaboration
	Support of safety and material provision	Enhances organizational performance through teamwork and collaboration, produces higher quality work, encourages a positive organizational reputation, establishes a mechanism for conflict resolution, encourages investment in employees, fosters client satisfaction	Having material available enhances performance and enables provision of safety measures, medical insurance, and equal treatment, enhances creativity and performance, supports teamwork and collaboration, innovation, and problem-solving, promotes communication, fosters trust and work–life balance

4.6. Summary

The weak governance structure of Nigerian construction organizations has encouraged compromises in the legal structure and principles of construction practices. Without a proper legal framework in place, individuals may face unfair treatment, which leads to distrust and dissatisfaction. Inadequate employment and work law create ambiguity in project managers' job security, cause anxiety, and hinder their commitment and loyalty. The absence of clear and enforceable contract law results in disputes and unclear responsibilities, which expose projects to delays. Frequent changes in construction policies and regulations disrupt project planning, resulting in project managers struggling with evolving challenges that affect their ability to deliver projects successfully. This leads to the absence of standardized project management processes and methodologies.

These combined effects create a challenging working environment for project managers in the Nigerian construction industry. The effect of the embedded factors and weak governance has created a strained relationship between project managers and employers and has eroded trust and employer support. Mutual distrust was found to be due to the risk perception of project managers and employers, and the project manager's motivational support. The pervasive negative activities of the embedded factors due to weak governance and a lack of trust between project managers and employer organizations cause the under-utilization of project managers in construction organizations in the NCI. Mutual distrust between project managers and employers is a serious problem. This problem is analyzed in more detail in the next chapter.

5. Discussion, Findings, and Directions

5.1. Existence of Mutual Distrust

Trust has significant effects on enhancing the credibility, psychological safety, and loyalty of employees. Trust in project managers' abilities and commitment is essential for successful outcomes through their technical expertise, problem-solving skills, transparent communication, strong relationships with stakeholders, and informed decision-making [20]. This study found that trust in the abilities and commitment of project managers in Nigerian construction organizations is significantly low due to their limited project management experience.

5.2. Risk Structural Diagram

In this section, the mutual distrust between project managers and employers is analyzed in detail. To do so, this study identifies the interrelationship of risk perception between project managers and employers using the definition of risk in ISO31000 [66]. ISO31000 is an international standard for risk management that provides principles, a framework, and a process for managing risk effectively within various types and sizes of organizations, including sectors and industries [66]. ISO31000 emphasizes the importance of integrating risk management into an organization's overall governance and decision-making processes through the provision of a systematic approach to identifying, assessing, treating, monitoring, and communicating risks.

The aim is to assist organizations in making informed decisions, improving resilience, and achieving their objectives in the face of uncertainty. Risk is defined as the “effect of uncertainty on objectives [67]”. Uncertainty is defined as “the state, even partial, of deficiency of information related to understanding or knowledge of an event, its consequence, or likelihood”. Figure 2 identifies the flow of the “objective-uncertainty-risk measure” of each party and their interrelationship. This flow is intentionally represented in the opposite direction: top-down for the organization and bottom-up for the project manager. Each party has a different objective, interest, or priority. When trying to achieve these, uncertainty and risk occur. To deal with these situations, appropriate measures are taken. It should be noted, however, that a measure taken by the first party may influence the second party, and that the second party's measure influences the first party.

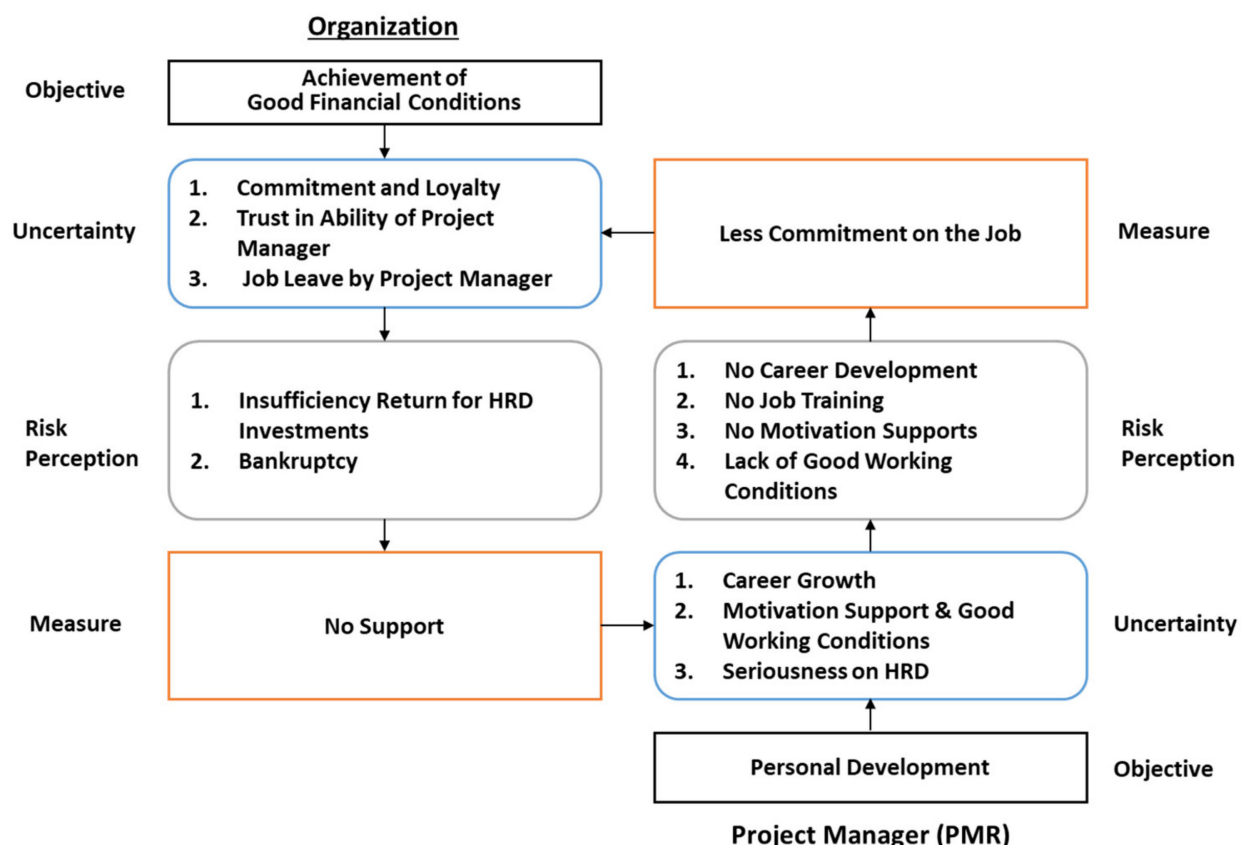


Figure 2. The vicious cycle of uncertainty and risk between employer and project manager.

Organizations focus on the achievement of good financial conditions. They are uncertain about their financial situations because the pervasive political influences and embedded corrupt practices, particularly bribery, within the industry contribute significantly to the financial challenges faced by organizations. Obebe et al. [16] claimed that corruption and bribery as a result of political interference have a negative impact on the success of

Nigerian construction projects. Organizations are also uncertain about project managers' abilities, their commitment to their jobs, and their loyalty to the organization. They are deeply concerned about the high costs associated with human resource development (HRD) initiatives. This concern is exacerbated by the fear of trained project managers departing after receiving HRD, as they may be lured away by more enticing job offers from other organizations [68]. These situations have led organizations to take a measure of "no support" in project managers' objectives of career growth.

Project managers are interested in their career development, with equitable incentives to achieve self-fulfillment needs. However, the "no support" defensive measures taken by organizations have limited their opportunities for career growth, skill development, and other motivational support, which has led project managers to the feeling of being undervalued by their organizations. Aung et al. [69] claimed that higher demotivation of managers in construction organizations results in less satisfaction and productivity. Furthermore, the absence of functioning employment and work laws in the industry has led to job insecurity and unfavorable working conditions, including unfair salaries, discrimination, insufficient health and safety protection, and lack of incentives. This has led to project managers showing less commitment, making limited contributions, and overall exhibiting poor performance. This study observed key perceptions that project managers are likely to be committed and loyal if they perceive career growth and recognition through rewards and incentives. Hence, the lack of opportunities for career growth, a shortage of motivational support, and insufficient job training to enhance their skills have driven project managers to adopt a defensive measure of "less commitment" to their roles and responsibilities. Zailani et al. [61] affirmed the importance of distinct motivational factors on employee performance in construction organizations.

This measure further increases the uncertainty of the organization. "Defensive measures" by both parties increase their uncertainty about each other. In the current NCI, therefore, there exists a vicious cycle of uncertainty between project managers and their organizations. By representing the flow of the four items of "Objective-Uncertainty-Risk Perception-Measure" for the organization and project manager in opposite directions, the vicious cycle is easily visualized. This causes their mutual distrust. To reduce it, it is necessary to cut off the vicious cycle of uncertainty.

5.3. Structure of the Underutilization of Project Managers

This study found that organizations perceive uncertainty regarding their project managers' abilities. It is necessary to identify the causes of the perceived uncertainty toward project managers' abilities. To do so, this section explores the structure of the underutilization of project managers. Figure 3 demonstrates this. It consists of two subsystems: a subsystem for creating the underperformance of project managers and a subsystem for lowering the commitment of project managers.

It was revealed that the ineffectiveness of contract law, the instability of government policies and regulations, and the ineffectiveness of employment and work law are the consequences of the adverse and pervasive impacts of embedded factors, which are driven by personal gain. These embedded factors, which include corruption, political influence, and pressure, collectively contribute to the inefficiencies observed in the institutional environment framework. This aligns with Usman et al. [22], who claim that corruption and political interference mutilate the ethics of the construction sector in Nigeria.

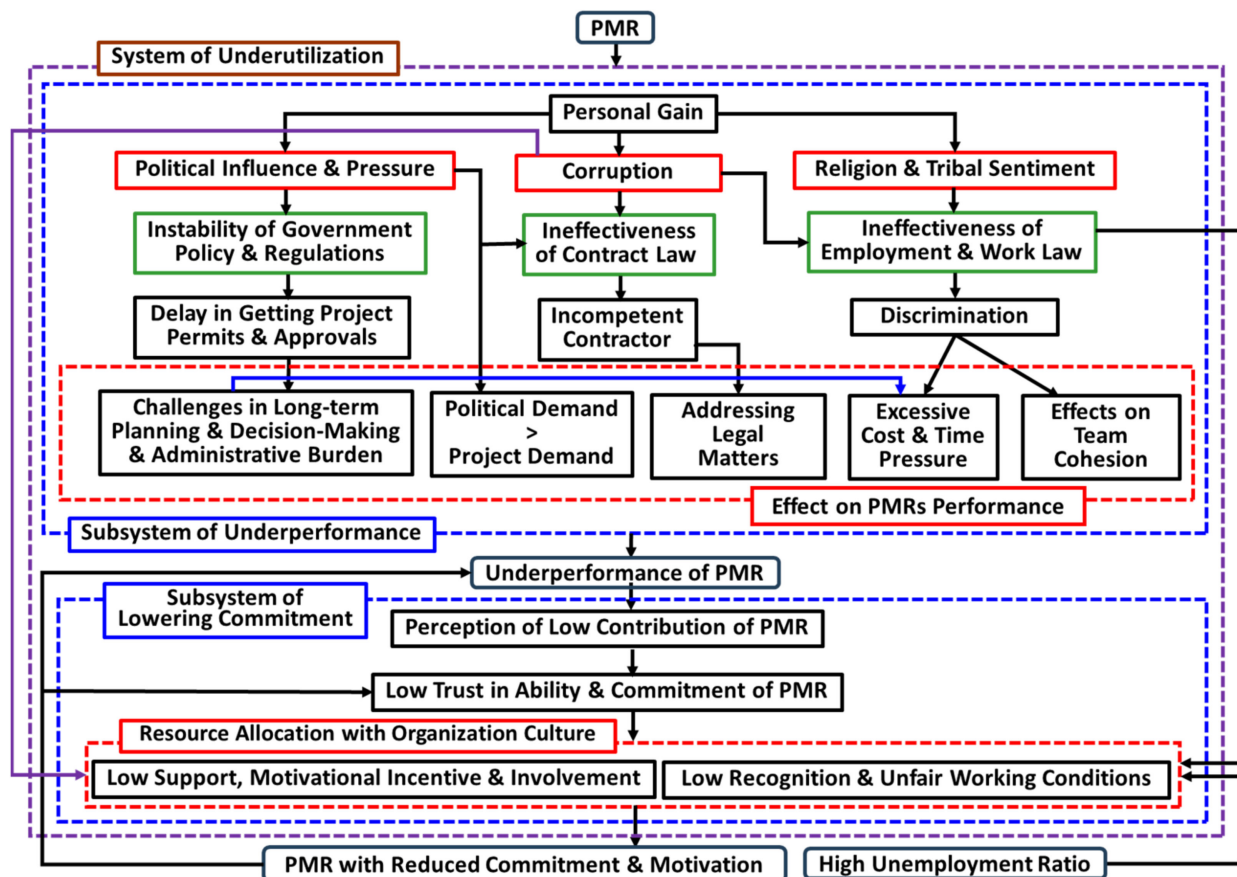


Figure 3. Structure of the underutilization of project managers.

The findings indicate that the undesirable effects of political influence and pressure contribute to the instability of government policies and regulations and affect contract law. This situation forces project managers to prioritize the self-demand of political elites over project demands. The instability of government policies and regulations also causes delays in obtaining project permits, thereby hindering construction organizations' long-term project plans, causing administrative burdens, and influencing PMRs' decision-making [25]. This situation also imposes excessive effects on project costs and the specific period of the project. Furthermore, the adverse effect of corruption results in the ineffective function of the rules of the game in the institutional environment, which negatively affects the integrity of the game's transactions in the government structure [43]. The ineffectiveness of contract law is ascribed to corrupt practices such as bribery, which influence the contract bidding processes, resulting in the awarding of contracts to unqualified contractors that often lead to legal arbitration. The study further found that corruption and religious and tribal sentiments contribute largely to the ineffectiveness of employment and work law [16,41].

The weakness of this law contributes largely to unfair working conditions, which include job insecurity, unfair salary, lack of promotion, and insufficient safety and medical provision [7]. This lack of functioning employment and work law also causes religious and tribal issues, leading to discrimination in the workplace, which results in a lack of project team cohesion. Thus, three components of governance—that is, the ineffectiveness of contract law, the instability of government policies and regulations, and the ineffectiveness of employment and work law—force project managers to underperform their tasks. This is the mechanism that creates the underperformance of project managers. It should be noted that this exists independently of project managers and works as an external constraint. This results in low contributions from project managers during projects. This was found to have led to low trust in the ability of construction organizations' project managers. Low trust in project managers becomes one of the reasons for the continuation of “organi-

zational culture” that results in low support and motivational incentives, low recognition, unfair working conditions, and low involvement in decision-making. Bond-Barnard and Steyn [20] argued that a lack of trust in the project management team affects knowledge sharing among the team members and stakeholders. Corruption is another reason for low support. Corruption in the sector leads to the diversion of funds that could be allocated to employee benefits, resulting in minimal rewards and a lack of career growth opportunities within the organization.

The ineffectiveness of employment and work law promotes corruption. The high unemployment ratio in Nigeria is also an influential environmental factor. All of these factors have contributed to less commitment from project managers to their project responsibilities. This worsens their underperformance and causes low trust in the commitment and loyalty of project managers to their organizations. It should be noted that this subsystem not only lowers the commitment of project managers but also becomes the second mechanism that causes their underperformance.

Therefore, to solve the problem of the underutilization of project managers, it is necessary to change the subsystem of underperformance and lower commitment to one of high performance and higher commitment. In the next section, the direction for new systems is discussed.

5.4. Direction to Subsystems of Higher Performance

Based on the results and findings, this study identified good examples relevant to enhancing project managers’ commitments toward higher performance.

Direction of the Subsystem of Higher Commitment: Empirical Findings

This study establishes empirical findings on organizations controlling the vicious cycle of uncertainty and risk between employers and project managers in construction organizations in Nigeria. In the course of its interviews, this study discovered that certain organizations have implemented effective mechanisms that align project managers’ personal aspirations with organizational objectives through motivational strategies, thereby enhancing their overall performance. These organizations established structured programs to recognize and appreciate the efforts of employees, including project managers. The programs create a system that acknowledges outstanding performance in various aspects of project management and encourages a culture of verbal recognition in team meetings as well as written appreciation provided by the board of directors, highlighting specific contributions and successes. The programs implement performance-based approaches with transparency, where bonuses, incentives, and rewards are tied directly to the performance of employees in achieving project goals.

The organizations also facilitate professional development, such as workshops and seminars, to enhance project managers’ skills and knowledge and help them to acquire the new certifications that support their professional growth within their organizations. Clear career pathways and mentorship programs are other essential approaches used by these organizations to provide detailed career development plans. These programs help organizations to specify promotion criteria and provide seasonal mentors who guide the personal aspirations and career development journeys of employees. These programs help them to align their career growth with their job requirements. These organizations create and practice an inclusive organizational culture that focuses on diversity and inclusion initiatives, where all employees, including project managers, feel valued and respected. According to Ameh and Daniel [68], an inclusive organizational culture creates employee and employer relationships and enhances organizational performance. The culture helps to promote a sense of belonging and friendship through employee engagement initiatives, such as team-building activities, and wellness programs, such as health insurance.

Supportive leadership was mentioned by these organizations as one of the most important approaches. This approach encourages leaders to demonstrate empathy, by understanding the challenges and feelings of their team members, and flexibility, by ac-

commodating every opinion. This ensures the accessibility of leaders and top management and enhances regular one-on-one meetings. The organizations claim that it creates an open working environment and promotes a culture of trust and mutual respect. Moreover, some organizations have introduced strategies to offer company shares to dedicated managers at reduced prices, including project managers who have worked in the organization for at least 10 years. This initiative effectively transforms these project managers into shareholders within the organization. It serves as a continuous reminder to enhance commitment, emphasizing the importance of putting in their best to improve their shares in the company. Henkel and Haley [70] highlighted the significance of motivating project managers for their indispensable role in achieving project success. This approach not only promotes a sense of ownership, of belonging, and of loyalty among project managers but also aligns their personal interests with the organization's overall success.

From the analysis, it was observed that recognizing the efforts and achievements of project managers increases their morale, promotes motivation, and enhances relationships. Project managers feel valued and supported if their contributions are acknowledged and appreciated. Johan and Jha [62] claim that increasing the motivation of workers enhances their performance and supports their chances of staying in the organization. The findings further indicate that collaboration with project managers to understand their career paths, conduct regular performance reviews, and recognize achievements through appreciation, training rewards, and support for career growth enhances their commitment and loyalty. Promotion, long-term incentives, and continuously improving retention strategies were used to ensure that invested project managers stayed committed to the organization and improved project performance [65]. In addition to improving performance, these help to retain talented project managers and allow them to benefit from the organizations' supportive programs. These approaches increase their motivation and innovative skills and enhance their competitive reputation in organizations. These findings agree with Tam and Watanabe [71], who remarked on the effect of motivational support on workers to create positive relationships and satisfaction toward enhancing productivity. Another study conducted by Kazaz et al. [65] found that training and motivation are keys to increasing performance in construction organizations. The findings affirmed the suggestion of the expectancy theory that an individual's motivation to exert effort is influenced by their expectations.

5.5. Directions for Changing the Underperformance Structure

In this section, directions for changing the underperformance structure are discussed. Achieving this goal requires a collaborative effort involving regulatory bodies, NCI experts, and relevant government stakeholders to comprehensively understand the challenges faced by all parties and jointly develop effective solutions. This involves identifying outdated or ambiguous provisions and updating them to align with current industry standards and best practices, as well as implementing clear, efficient, and standardized procedures that reduce bureaucratic hurdles and speed up the issuance of permits.

Embracing digitalization is essential to minimize paperwork, enhance transparency, and increase awareness within the industry about revised regulations and the importance of compliance. In addition, the government should establish a monitoring and enforcement system together with penalties for any violation to ensure compliance, and institute periodic reviews of the regulatory framework to identify emerging issues and adapt regulations accordingly. Furthermore, it is imperative to mitigate the risk of personal gain that leads to corruption, political influence, and pressures in the industry through a range of measures to promote transparency, ethical behavior, and accountability. Usman et al. [22] and Kasimu and Isah [26] argued that establishing an enforcement mechanism in the industry would help in upholding ethical practices.

Therefore, to address this situation, the government, in collaboration with the NCI, needs to develop and enforce a comprehensive code of conduct that explicitly addresses issues associated with personal gain that all contractors and stakeholders are aware of and adhere to this code. Implementing anti-corruption policies that outline an organization's

stance against corruption and provide guidelines for reporting any suspicious behavior is one of the effective measures that could help in reducing the negative effect of personal gain. In addition to these measures, establishing a whistleblower protection program with clear channels for reporting and investigating allegations will encourage the contractors and stakeholders to report unethical behavior without fear of retaliation.

This multidimensional approach will contribute to a more effective and responsive regulatory environment that fosters a shift toward prioritizing project objectives over corruption and political interests by project managers in the construction industry.

Therefore, this study recommends the establishment of an enforcement body by the government to ensure the effective implementation of employment and work laws in the NCI. This measure aims to ensure that construction organizations adhere to the law in order to protect the rights and well-being of employees. To strengthen contract law, this study suggests a need for governmental reforms with an enforcement system that contains punishment for violation in order to reduce corruption practices that often lead to contracts being awarded to incompetent contractors. To address the issue of excessive delays in obtaining permits, this study proposes the implementation of reform policies and regulatory frameworks developed through collaboration with regulatory bodies, NCI experts, and government stakeholders. Nweze [27] suggested the necessity for collaboration among the government, construction professional bodies, and relevant stakeholders to establish a system aimed at reducing delays in obtaining permits. This will help in understanding the challenges faced by all parties that slow the issuance process, as well as jointly update and clearly state the permit issuance procedures to enhance transparency, accompanied by a monitoring and enforcement system with penalties for violations.

6. Conclusions, Suggestions, and Limitations

This study comprehensively analyzed the causes of the underutilization of project managers in the NCI. Using institutional analysis, the impact of embeddedness, institutional environment, governance, and resource allocation, and their relationship to underutilization, was analyzed.

The vicious cycle identified in this study is considered one of the most serious motivational problems in the NCI. Each project manager is feeling uncertainty and anxiety. Can I grow my career? Do I have motivational support? Is the company serious about support? Some studies suggest the organization supports project managers and enhances their motivation. However, the organization is also feeling uncertainty and anxiety. Are they trustworthy? Are they capable? Are they going to leave the organization? This uncertainty and anxiety keep growing and become mutual distrust. It does not seem to be an overstatement to say that the underutilization of project managers is a problem of the loss of the nation's wealth in Nigeria.

This study gives a reason for the underutilization of project managers and a direction for its solutions in the NCI. It is found that embeddedness, institutional environment, governance, and resource allocation form a system of underutilization. The system consists of a subsystem for underperformance and a subsystem for lowering the commitment of project managers. The reduced commitment and motivation of project managers are outputs of these systems.

The project managers are "forced" into a tough environment, much of which is uncontrollable by them, including aspects such as politicians' pursuit of personal gains, corruption, religious and tribal sentiment, and weak governance of law and regulations. These "external" factors always put unnecessary demands and pressures on project managers. It prevents project managers from using their full potential in their work. Their observed performance is considered to be lower than their true performance. Unfortunately, their organization perceives this observed performance as their true performance. This doubt becomes a "seed" of low trust in the ability and commitment of project managers. Insufficient support for employees is culturally embedded in many Nigerian construction organizations. Low trust towards project managers even causes cuts in support for project

managers. This lowers their commitment and trustworthiness, which may adversely affect their performance even when the next opportunity is given.

The academic novelty is as follows. First, this study identifies that the underutilization problems be broken down into two main problems: underperformance and reduced commitment. As a first step towards solving the problem, it is essential to clarify the structure of the problem. Second, this study shed the light on controllability of system components. As a next step towards problem-solving, it is necessary to identify who should be responsible for developing and implementing each part of the solution. Third, this study demonstrates the applicability of the four-level framework of institutional analysis from the new institutional economics defined by Williamson [44] to a new problem. The first and the second academic novelties were generated because the right theoretical framework, the four-level framework of institutional analysis, was used.

This study is expected to contribute to solving this underutilization problem. This problem seems to have been neglected, except for “blaming” project managers for “low” ability and commitment. However, the problem has been incorrectly perceived and identified. The study provides insight into the actual problem and who should be responsible for solving the problem. The authors anticipate that this study will stimulate and facilitate problem-solving efforts in this regard.

Although the best efforts were made in this research, there are limitations and future issues. The first one is sample issues. Sample collection in four geopolitical regions instead of six geopolitical regions of Nigeria is considered a limitation. Additionally, the uneven distribution of interviewees among professional positions is another issue because it may have induced some bias in their responses. For future research, it is advisable to collect samples from a broader and more diverse range of participants to enhance the study’s strength and generalizability. The second one is the effectiveness of the quantitative study. The structure of the problem was qualitatively analyzed, and there is potential for further exploration through quantitative investigation. It is also important to study the degree of underutilization, underperformance, and reduction of commitment and motivation, and it would be worthwhile to try to represent them with reliable indicators.

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