

Impact of Institutional Environmental Factors on Project Performance-An Analysis on the Construction Projects in Lahore, Pakistan

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ABSTRACT

The construction industry has experienced a dramatic boom in the economy over the last two years, due to the significance of CPEC in Pakistan. In the project's performance, the role and concept of Institutional Environment have been extensively studied in previous literature. However, the analysis of these strategic constructs in construction firms has been minimal. Still, a gap exists in institutional factors concerning project performance. This paper aims to address this gap posits that Institutional Environmental Factors (IEFs) may impact the performance of the construction projects; also, there may be some factors that can impede or promote the performance of these projects. Data were collected from a sample of some construction firms' management teams through semi-structured interviews. Study results suggested that coercive & normative factors of the institutional environment have a significant impact on the project performance concerning time delays and cost escalation. However, mimetic factors have less impact. This study also tries to assimilate the importance of institutional factors with the policy-making aspects of construction firms which can affect the performance of the projects. Future implications and limitations of the study are also discussed.

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INTRODUCTION

The construction industry plays an important and visible role in every country's economic growth and development. Developing countries like Pakistan are in an ominous need to improve their infrastructure development and work for improvement and betterment. Based on the indicators such as infrastructure improvement, easy to access markets, economic growth, flexibility to respond to the disasters, and demographic perspective, Pakistan has been ranked the 11th least attractive and practical country because of performing poorest on institutional effectiveness. This is the lowest rank within the South Asian context ([Pakistan Economic Survey, 2019](#)). Association of Builders and Developers of Pakistan requires the government's friendly institutional environmental policies to head construction projects effectively. There is a need to have recent and updated information about management tools and design & the construction process for managing the construction projects. Construction projects are fundamentally complex due to their scope, cost, deadlines, time frames, and technological issues ([Santos, 2021](#)).

Construction projects are initiated in dynamic and composite environments, resulting in risk and high uncertainties. For a construction project manager, it is necessary to understand the recent market challenges and institutional environment and act accordingly to complete the projects successfully. The literature somehow addresses the concept of Institutional environmental factors (IEF) differently ([Tolbert & Zucker, 1999](#)). The development of construction projects is considered weak without proper environmental factors, which is essential to the performance of the construction projects ([Akanni et al., 2015](#)). From the viewpoint of a developing country, the leading construction sectors of Pakistan are considering an ominous requirement of a feasibility study made by experts for the propensity and growth of the construction industry. Institutional theory in the past has been used in studying organisational analysis and behaviours. 'Institutional' comes from the social context. It is about the change and stability in the institutions ([Scott, 1987](#)).

Neo-institutionalism theory emphasises social environments guided by set patterns, rules, regulations, definitions, and norms and interact with individuals, organisations, and governments. This environment creates constraints by showing similarity of activities and creates pressures on the individuals interacting, shapes action, and all players need to obey these rules ([Tolbert & Zucker, 1983](#)). As far as environmental factors are concerned, the recent Orange Line Metro Train (OLMT) project in Lahore, Pakistan, has become controversial due to its internal & external environmental factors. OLMT project was initiated through the MOU signed between the Governments of Pakistan and China in 2014, and all finances were available in 2015. This project was planned with

a good intention to provide a safe and international level transit facility to the people of Lahore, Pakistan. Still, due to the high environmental constraints, it became controversial. It is also considered one of the massive transport projects of Lahore, a metropolitan city of Pakistan.

Also, a large-scale project like the construction of OLMT, especially if gaps and ambiguities flaw it, results in hefty socio-ecological costs followed by demoted societies and groups. This point is subject to the OLMT project. Traffic buzz in Lahore is hefty. Due to this, air pollution is increasing and is a significant threat to the health of the citizens. Environmental Act's section entails that the OLMT project will lead to high dust and air pollution issues, resulting in severe health problems like respiratory diseases, heart attacks, lungs problem, nausea, and dizziness. Whenever these types of large developmental projects are executed, they always come across issues like earth excavation, land leveling, dislocation of people, deforestation and defrayal of vegetation, etc. This project also faced legal restrictions regarding stay orders by the local people. Isomorphic pressures created by the institutional environment has urged the study to explain further the relation between these factors and their impact on the construction project performance, said [Adnan \(2017\)](#) in a published article of The Express Tribune.

The study deals mainly with the neo-institutionalism approach with its isomorphic dimensions using a base of institutional theory to see the impact of these factors on project performance. This study, in turn, will reveal the underlying effects of institutional environmental factors on construction projects. The theoretical contribution of this paper for analysing the construction project performance will play an important role and guide the policymakers in making friendly policies regarding the construction sector in Pakistan. This study aims to broaden the institutional aspects of the neo-institutional context in analysing and understanding the general environment in which projects operate.

This study will also help judicial authorities to provide a sound legal framework for the working of construction firms in Pakistan. The study would also be beneficial to regain the stakeholder's confidence and encourage financiers to invest in construction projects. Previous literature mentioned above extensively studied neo-institutionalism in conventional organisations. However, neo-institutional factors in the construction industry affecting the performance of the projects are yet to be studied and explored further as the research lacks the study in this context.

LITERATURE REVIEW

Institutional Environmental Factors in Light of Neo Institutionalism Approach

Institutions contain three essential elements; normative, regulative and cultural cognitive, combined with the linked resources and activities to shape the meaning of social life. These elements are considered the basic blocks of the institutional structures (Scott, 1987, 1995, 2008). By the Scottish definition, institutional environmental factors (IEF) support the project operations, and no construction project is planned and initiated without managing its operations. Environmental factors refer to the environment or conditions that influence, compel, or direct the projects, and these factors create such environments where projects are initiated and operated (Harris, 2019). Institutional theory in its starting era was used for economic, social and political studies to study firms' behaviour and organisational fields. Under institutionalism theory, the institutional environmental factors have been studied extensively (Smith, 2006; Zucker, 1987).

Suddaby et al. (2010) and Tzeng (2018) explained that organisations could be treated as an institutional context. It has been observed that institutionalisation is an interaction between actors, their actions, and shared meanings. Yusof et al. (2017) studied the relationship between environmental practices and the implementation of construction projects. They used the three characteristics of environmental practices (complexity, relative advantage and compatibility). Relative advantage talks about the extent to which environmental practices are beneficial (economic, social and environmental such as reputation) from other practices. Compatibility defines that environmental practices consistent with the organisation's existing values and complexity define how much these policies and practices can be challenging to implement. The neo-institutional approach is mainly connected with the socio-psychological term highlighted the cognitive practices of individuals. The study illustrated individuals as information processors who use the code of conduct and scripts for their interpretation to behave, shape organisational culture and affect the organisation's environment (Hadler, 2015)

Another study of the Dutch construction industry suggested that employees (actors) used relational, institutional work to motivate the stakeholders from two different fields and develop strong interactions with others when working on inter-organisational projects. This institutional work is done with the new stakeholders working in two different fields and bringing together the delivery method of new projects (Lieftink et al., 2019) It has been perceived that institutional perspective, new stakeholder arrangements, and various government policies impact the quality of large-scale modern housing projects in China, especially when constructing new modern housing projects in

neighborhoods (Chen & Lin, 2018). Goodell (2019) advocated that institutional norms shape individuals' behaviour and connect with societal norms, culture, and customs. Institutional logics illustrate the actors (employees) in inter-organisations often incline their behaviours, norms, attitudes, and values when working with different stakeholders. This change mostly happens with the shift in market conditions (Fong et al., 2018)

Neo-institutionalism is vital while developing a theoretical context specifically in organisational and management research. The neo-institutional approach focuses on cognitive facts, including social perspectives, and considers communication essential to institutional theory (Eriksson et al., 2018). Neo institutionalism for identifying the administrative styles consequently affects the administrative reforms. Thus, it is said that the neo-institutional theory can also be used for making reforms in administrative policies. It also affects the administrative style of organisations as they use the neo-institutional model (Howlett, 2002). van den Ende and van Marrewijk (2019) used the neo-institutional lens to investigate the two subway projects in the state of Amsterdam. They come across that both the projects bear the severe community conflict by the local people trying to protect the historic city. Reconstruction of the project refers to the institutional work used by the project managers involved. It shows how the actors involved in projects plan respond to the uncertainties and implant them into their environment. Additionally, the study explained that neo-institutional theory covers the lawfulness of projects according to their credibility and social acceptance.

Neo-institutionalism talks about the broader sense of institutional work. It not only talks about the organisation's institutional work in their internal environment having regulatory/coercive forces, norms, values, and cultural elements making the aura in the organisation but also helps create the proper environment required to operate the projects. As for seeking legitimacy, giving response to the uncertainties, and institutional change, the actors in the organisation, are enforced to act accordingly and think actively for responding to the changes and making a better decision (Scott, 2012). Current explanations of neo-institutionalism explain it from an aesthetic point of view. The four most referred reasons of institutional survival are taken-for-grandness, active involvement and making sense. Weik (2019) provided two arguments against the traditional meaning of institutionalism. First, the study claimed that institutional elements offer an active belief code of conduct that creates and distinguishes the institutional sub-processes like arrangements of institutional practices, subjects, objects, and discourses. And these institutional elements are distinct by definitive values specific to each institution. Additionally, they claimed that taking for grandness is not essential for the institution's survival, but it may

support it. Moreover, institutional forces that resist survival create harmony and rhythm in institutions.

Institutional isomorphism boosts the organisations' capability to innovate. The study directs that isomorphic pressures help in decision-making to improve sustainability and minimise disaster risks. Further institutional environmental constraints are not reduced; they may increase the risk condition of societies (Toinpre et al., 2018). Another research study conducted in Germany illustrated that institutional actors could build bridges for sustainable city developments in institutional change. Entrepreneurs who early accept the institutional change can overcome obstacles to the process of institutionalization (Weisenfeld & Hauerwaas, 2018). Another study suggested that advanced governance, institutional reforms, and novel longitudinal arrangements are essential for sustainable housing projects (Chen & Lin, 2018). The Neo Institutional Theory is essential for management and organisational research. Neo institutional theory focuses on cognitive elements like shared logic, mental models or scripts as legal ways to act in institutional settings. This includes the importance of communication in institutional theory. Likewise, projects cannot be initiated and operated without proper communication so that the institutional theory can understand the communication management in the respective institutions (Eriksson et al., 2018).

Environmental pressures stress human health, and the second is the protection of natural resources and ecosystems. Education has been considered the most significant factor in better understanding environmental strategies and processes (Martínez-Ferrero & García-Sánchez, 2017). Knowledge sharing about psychological, cultural, societal factors, institutional differences, & safety measures become difficult to proceed with due to site accidents at construction sites. For this particular reason, internet communication sources & mobile apps are necessary for communication purposes. Thus, institutional logics are necessary for the construction industry as knowledge sharing is as necessary for project management firms like construction as in other sectors. For this reason, communication plays a vital role in managing projects (Li et al., 2018). Managing communication is beneficial because it enables an effective and efficient flow of information between the stakeholders and project team & environmental factors used as an input in managing communications (Harris, 2019).

Wei and Chiu (2018) conducted a study in China, and according to them, institutional processes and forces should be considered for the livability of large-scale subsidised housing states. The study also examined the relationship between livability and institutional factors in developing countries with a change in an institutional environment. Betts et al. (2018) additionally illustrated that manufacturing plants face more coercive pressures in advanced

economies. To overcome these pressures, environmental practices enhance their environmental performance to gain lawfulness. Moreover, research explains coercive, mimetic, and normative isomorphism. Coercive isomorphism is created due to the pressures exerted by the other dependent organisation and societal expectations, which exert formal and informal pressures on the organisations. Normative isomorphism involves growth and professional network collaboration that organisations copy from other organisations. Mimetic isomorphism suggests that organisations follow good practices from other similar organisations.

It has been found that the growth of the professional-managerial mix and the hidden boundaries between organisations and professions can be observed as they make cooperative professional interests in more marketed and bureaucratic workplaces (Brock & Saks, 2016). This sense of professional apprehension precisely leads to the neo-institutionalist attitude (Comyns, 2018). Institutional factors impact the quality of climate change reporting of multinational companies. Increased institutional detachment in policy, rules & regulations demonstrates that companies have difficulty adopting modern practices but adjust their policies to conform to local institutional environments (Carvalho et al., 2017). The public only supports legally strong organisations. To survive, organisations must consider the environmental pressures as these pressures explain how to seek lawfulness and suggest actions to gain survival. Institutional theory specifically emphasises the population (actors) and fields in organisations. The further study explains the three fundamental institutional pillars based on conformity, indicators, logic, mechanisms, and legitimacy. As project-based organisations involve internal and external actors, the importance of stakeholders (increases). Moreover, examining the behaviour of stakeholders in an organisational context also compels the researchers to study institutional environmental factors in detail (Martínez et al., 2016)

Roxas and Coetzer (2012) examined the impact of the institutional environment on managers' attitudes and its effect on environmental sustainability and operationalised the three elements of an institution as regulatory dimensions, including compliance by rules, regulations, sanctions, penalties and acknowledging the best practices of government, cognitive dimensions comprising of environmental issues, shared values and knowledge of benefits and normative dimensions containing promotions, advertisement, attitudes, encouragement from organisations, and business associations. Söderlund et al. (2017) concluded that the infrastructural mega projects face numerous challenges. Compared to regular projects, they demand different technical ways to handle and organise and manage them. Further, to handle the megaprojects, there is a need to comply with

the institutional factors more logically because of the changing nature of the projects as each project requires a different new team, owners, stakeholders, and different subfields. This logical nature urges to analyse the institutional environment for the successful delivery of the projects and enhance the lawfulness and survival of the respective organisation. Moreover, the institutional approach also helps to advance better practices and policies that increase the chance of the organisation's stability.

Every organisation works for its sustenance and lawfulness and makes policies for its survival. Policy and cultural pressures by the external environment must plan and implement the policies and create an environment that protects its legality and survival. According to PM Body of Knowledge, these elements provide the environment in which projects operate. [Martínez-Ferrero and García-Sánchez \(2017\)](#) assumed the neo-institutional approach, suggesting that following the institutional rules shapes structural connections between the organisations and actors. Isomorphism is the assurance of sustainability among organisations causing mimetic, coercive, and normative factors to come into action. According to [Caravella \(2011\)](#) the institutionalisation of organisations depends on the mimetic, coercive and normative pressures because these forces exert pressure and create an environment that forms the similarity, conformity, competition and makes an influential group of professionals network values.

According to [Walgenbach et al. \(2017\)](#) the neo-institutional theory includes cognitive elements and involves regulative elements such as legitimacy. The study illustrates that legitimacy is a feature created as the result of interacting with the internal and external environment of the organisation. The neo-institutional approach considers the actors as inherited decision-makers who respond to the institutional environment as their peers or actors perceive the response from their ex-organisational experiences. Moreover, the environment is considered the most critical element that enables the actors' reactions and needs an instant response. [Carvalho et al. \(2017\)](#) illustrated that the organisations work on the same pattern and play a role in which they are embedded in their social environment. [Chaney et al. \(2015\)](#) neo-institutional theory notify the market that the product should be identical and introduced in the market means the project's outcome should be according to the market demand.

[Alvesson and Spicer \(2018\)](#) suggested neo-institutional theory as a fundamental approach to conduct organisational studies and have been extensively considered for almost four decades. The study also suggested neo-institutional theory as the most significant school of thought to analyse the organisational fields. The theory involves the individual organisation, its broader sub fields, and its linkage with the social environment. [Akanni et al. \(2015\)](#) explained the impact of

environmental factors on the project performance of building projects in Nigeria. The study poses and describes the challenging environmental factors that significantly challenge the projects' performance. As project management practices are extensively used in construction management firms from initiating till the closing of the projects, the factors of institutional environment are necessary to be discovered and studied further.

Project Performance

Project-based organisations like construction institutions excessively rely on the best performance of their projects. Each person involved in this process, from project managers to their team members, wants the project to perform better and to be successful. [Um and Kim \(2018\)](#) proposed that early detection of poor project problems is essential, and they used the early performance measurement system to define the changes in the environmental system. Key performance indicators are used extensively to set the baseline for monitoring performance. According to [Hu et al. \(2007\)](#), performance measurement is essential for an effective project management plan. Project performance is measured through delivery time, cost/budget, stakeholder's satisfaction, customer satisfaction (when perception exceeds expectations), and clients' benefits. [Li et al. \(2018\)](#) claimed that the performance of the projects is measured through six items, deliverables aligned with client objectives, quality according to the standards, a project working within pre-budgetary requirements & already decided schedule, and project outcomes following the stakeholder's requirements.

[Zheng et al. \(2018\)](#) suggested a positive relationship between user interests and relational norms that affect project performance. Relational norms protect the user interests, which improve the projects' performance. Moreover, in construction projects, the most significant indicators for measuring project performance are construction quality according to the scope mentioned in the contract, its cost, i.e. project life cycle cost within the budget and completion time within the predefined schedule or earlier. Good project performance is essential for providing facilities and services to the clients at good quality and economical price. [Castillo et al. \(2018\)](#) explored the relationship between organisational characteristics and project performance in construction companies. Key performance indicators are used to define the performance of projects periodically. [Radujković et al. \(2010\)](#) and [Yeung et al. \(2013\)](#) stated that KPIs could assess the project performance in terms of quality, productivity, safety time and cost. These KPIs give evidence for analysing the performance.

Moreover, the environment in which projects operate is called environmental factors, according to [Harris \(2019\)](#). Thus, traditional approaches used in the past studies are cost, time, quality, safety and stakeholder's & client's satisfaction. [Castillo et al. \(2018\)](#) study state that social networks can also measure project performance as they influence its environment. In a book of Project Management, KPIs are used as the most crucial aspect of project management as these indicators give the clear direction in a project that which factors are essential. Also, project managers can take valuable decisions and minimise the risk aspects of the project. The KPIs mentioned in the book are; cost, schedule variance, and stakeholder's communications ([Hadler, 2015](#)). Institutions use KPIs to increase the performance of their projects, and these indicators are used to see those critical success factors which are essential to achieve success ([Badawy et al., 2016](#)). Cost, quality, and time are project performance indicators ([Harris, 2019](#)). [Chen and Lin \(2018\)](#) measure project performance through quality, innovation, benefits and schedule and use the constructs of leader-leader exchange goal orientations that highly impact the overall project performance. [Gruden and Stare \(2018\)](#) talk about the relationship between behavioural competencies and their effects on the performance of the projects. [Ngacho and Das \(2014\)](#) also used the key performance indicators for measuring the performance of construction projects in Kenya. This study highlighted six KPIs: cost, time, quality, safety, and environmental impact as traditional dimensions and indicators. Also, site disputes are another aspect to see project performance. In this empirical study, cost, quality, and time are considered. They include the economic aspect of whether site disputes and safety defend social considerations and environmental effect will continue to take care of environmental aspects. Developing countries like Pakistan also need a study that explains the internal & external environmental aspects that can impact construction project performance should be considered other than the traditional ones. Moreover, these environmental factors capture all dimensions of institutional indicators that are important to create, direct and maintain the construction projects' performance dimensions.

According to [Ali et al. \(2018\)](#) project organisations are also observed through an absorptive capacity of projects which improves the performance of the projects, and knowledge sharing is created and directed according to the absorbing capacity of organisations. Further, social processes are the reasons behind the active application of internal and external knowledge. Moreover, this knowledge then astounded project challenges and improved the performance of the projects. They measured the project performance through projects that meet the requirements according to the technical, operational specifications, budget and time goals, fulfillment of client's needs, and client's satisfaction. Construction firms provide evidence that performance measures of projects are

taken as success measures, especially in multi-project environments. A project that achieves business and project goals represents the project's performance. Experience and knowledge in handling projects affect the high performance of work practices and on project performance in the construction sector (Chapano et al., 2018).

The best management practices identify contractors and owners' sound & smooth decision-making for that purpose; different performance measurement systems are used in South Korea for building construction. Further, project characteristics are also crucial indicators used for measuring the performance of construction projects (Cha & Kim, 2018). Furthermore, external circumstances like the economic, social, and political conditions of a project affect the project's performance (Wibowo et al., 2017). Thus, these external circumstances also indicate the external pressures of institutional environmental factors. These factors give a clear understanding of what internal and external institutional environmental factors affect project performance in construction firms working in Pakistan. General KPIs are also named as traditional tools to measure project performance.

Institutional Environmental Factors and Project Performance

In the past, institutional theory examined the effect and nature of social, economic and political forces (neo-institutionalism) exerted by similar organisations working outside, within the institution, and the interference from similar organisations creates isomorphism and shapes actions of the actors. Every organisation seeks lawfulness, and it can only be perceived if they adopt the pre-stated structures, rules, regulations through which they learn to interact with other organisations in the same field. Most past research has examined a firm's performance at various levels (Scott, 1987). Institutional forces (coercive, normative & mimetic) are present in an industry, socio-economic and firm-level (Lau et al., 2002)

Neo institutionalism looks into the inter-organisational interactions formal structures and explains the role of the environment. Coercive, mimetic and normative elements create an environment for project operations Weik (2019). Further, it emphasises organisational behaviour's cognitive and cultural bases and defines cultural and cognitive bases of learning at play. Isomorphic pressures (coercive, normative and mimetic) have been extensively studied in the past literature to examine a firm's performance. However, the studies still lack these isomorphic pressures and their impact on the performance of construction projects. In the past few years, the construction industry in Pakistan has faced many problems (Gabol & Ahmed, 2011; Rizwan, 2015).

The above literature shows that institutional environmental factors influence how the institutions fit within and adapt according to the surrounding social environment. These factors shape the structure of the organisations by their interactions with the internal and external environment. In Figure 1 the conceptual framework is hypothesised by taking the institutional environmental factors regulative, normative and mimetic, and projects' key performance indicators, i.e., cost, time, quality, client satisfaction, site differences, and environmental safety factors. The proposition is developed by taking the development of institutional theory into neo-institutionalism to see the impact of these factors on the performance of construction projects in Lahore, Pakistan.

CONCEPTUAL FRAMEWORK

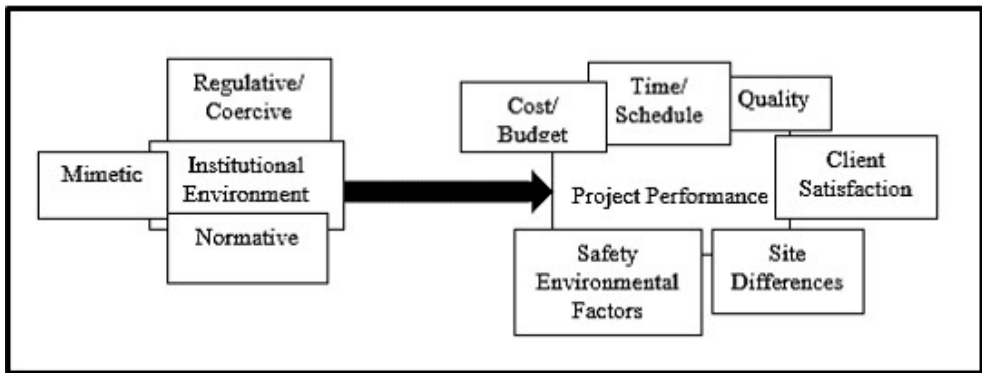


Figure 1: *Conceptual Framework*

METHODOLOGY

Besides using the conventional approaches of researching intuitionism and its impact, this study adopts the positive approach to see the project performance by applying neo-institutionalism in construction management firms. The nature of this study is explanatory because the information is known. This study attempts to explain the relationship between the variables and their impact and qualitative because it is done and collected through semi-structured interviews. This study is based on a non-experimental design done in a cross-sectional period. Secondary data has been taken from the literature, newspapers and online blogs. The field research has been done through conversations with participants at a construction site and observing participatory and non-participatory persons. A telephonic interview was conducted to take more insights into isomorphic pressures from the employees and ask about what

risks, issues, and pressures they are dealing with due to these factors. Targeted respondents were selected, ranging from six to twelve. The purposive sampling technique was used to conduct interviews with the company’s management. This study employs thematic analysis to interpret the respondents’ views.

RESULTS

By using thematic analysis following themes have been identified through their codes and summarized in the Table 1.

Impact of Institutional Environmental Factors on Project Performance

The results show that the project managers who plan the project well, consider the institutional environment, and integrate with the environment well can only save their construction projects from over budgeting and project delays. The Orange Line Metro Train (OLMT) and FC college Hostel projects are examples of construction projects in Lahore, Pakistan, which are affected by the Institutional Environment (IE), especially by coercive/regulative factors of IE. In developing countries like Pakistan, the construction sector is in a catastrophic need to focus on the significance of the institutional environment while commencing any construction project to avoid delays, cost overruns and improve construction projects’ performance.

Table 1.
Themes and Codes

Themes		
Importance of institutional environmental policies for smooth project completion	Flexibility in institutional policies to make employees show compliance accordingly	Strict compliance with set standards for project completion
Codes		

Continued on next page

Table 1 continued

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> ● Policies provide guidelines & frameworks to create an environment for working on projects smoothly. ● Policies specify limitations to the employees. ● Environment internal/external is much needed for the firm to maintain its culture & norms. ● Policies needed to be followed by each & every person from the top to lower-level management to ensure smooth project operations.
 ● Our construction firm has health & safety policies, quality assurance policies, some governmental policies, and environmental policies. | <ul style="list-style-type: none"> ● These policies are somehow flexible. ● Sometimes changes in policies bound or pressurises the employees to work accordingly. ● Few governmental policies are flexible, but some are hard to comply with, but firms need to follow the land laws accordingly. ● Policies that directly hit the project progress bound the employees' e.g. if required material or equipment is not reached in time on sites, the project work is delayed. ● Internal organisation policies are easy to follow, but some administrative policies limit the employees to work independently. | <ul style="list-style-type: none"> ● The environmental protection law of Pakistan is considered while making environmental policies of construction firms. This provides the environmental protection policies through the project operations, and employees are asked to comply with these strictly. ● International quality standards are followed like ISO 9001, 14001 & OHSAS 18001 to assure the quality standards. ● ISO 14001 is used for overall environmental performance and to manage environmental responsibilities. Project life cycle analysis, audit-related things, and different environmental changes like disasters, weather conditions, etc. ● Non-compliance with standards leads employees to penalties as well. ● It is the reason for project delays as to when a schedule is compromised and the cost and quality. The client would not be happy as well. |
|---|---|---|

Themes

<p>External environmental screening for operational consistency and constancy</p>	<p>Pressures of External Environment due to extreme uncertainty</p>	<p>Institutional policy pressures and negative outcomes on employee performance</p>
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Codes

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Table 1 continued

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| <ul style="list-style-type: none"> • Rules, regulations, and policies look after in the project's planning and designing phase so that the project's proper execution can be started and for the smooth operational working of the construction projects. • Also, such policies are forth seen in political instability, power plays, market fluctuations, and inflation, mainly when a project is in its initial stage. | <ul style="list-style-type: none"> • Due to the high uncertainty of these issues, weather changes market fluctuations are considered necessary, especially in developing countries like Pakistan. Earthquakes and floods are the main issues. • Political instability is also one of the core external issues which exert pressures, and power plays are one of them in the construction industry. | <ul style="list-style-type: none"> • Increased employee resistance. • Sudden changes in policies enforce employees to comply with the pressures. • Employee morale effects. • The effort they have already done while working on the project fades somehow, and their motivation gets low. • Sometimes employees get fed up. • Workers working on the sites also suffer from the change in policies as it hits their working parameters and consequently hits the performance of construction projects. |
| | <ul style="list-style-type: none"> • Corruption and no legal framework also create pressure. The Construction industry is suffering badly in its business and social environment, and its profitability suffers. | |

Continued on next page

Table 1 continued

<ul style="list-style-type: none"> ● It is obvious to take proper working on the external environmental screening in the planning stage of the project; some policy or legal pressures are beyond the control of the project manager and team. 	<ul style="list-style-type: none"> ● Change of government is also a disturbing factor. As state officials change, financial policies are reviewed for government construction projects and inflation increases. Project cost suffers as a resource person, and material price demand is increased. The project suffers directly despite having pre assumptions. Pakistan's economy is unstable. ● Weather forecasts in our country are not very effective. Still, we are lacking with latest technology and instruments. ● The inflation issue is adjusted in the planning stage of projects. ● Government laws should be revised and in favour of the persons who will be affected by the project. 	<ul style="list-style-type: none"> ● Personal and professional problems are also the reason to get the employee's morale down.
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Themes

<p>Zero tolerance on institutional policy implementation to ensure business decorum</p>	<p>Employee compensation and rewards for employee retention and motivation</p>	<p>Employee safety training and workshops conducted for employing safety procedures</p>
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Codes

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Table 1 continued

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|--|---|---|
| <ul style="list-style-type: none"> ● Our firm is on a 0% tolerance level about the sensitivity of the institutional policies as the management thinks that these policies define the specific criteria and limitations necessary to create the proper and good environment not within but outside of the firm. ● These policies create and maintain the business decorum promote a friendly culture and social relations. ● Employees get penalised for heavy fines by violating the rules and regulations. ● Severe legal violations cannot be born. ● The management can kick off employees. ● By non-compliance with these rules, the client suffers. ● Interrelation between the clients and stakeholders suffers. ● A project can be delayed. | <ul style="list-style-type: none"> ● Employees who obey the policies and rules and take care of business decorum are rewarded with cash prizes and sometimes appreciation certificates. ● Health insurance funds can be increased. ● Labours get cash prizes and sometimes medical rewards. ● Institutional policies secure the employees as well. ● The top management praises its employees for their work; this encourages them to do work more excitedly and conveniently. | <ul style="list-style-type: none"> ● Training sessions are not as such appropriately held. ● Sometimes firm sends general managers, sub engineers, and project managers to some national and international seminars & conferences to see and learn the recent trends & techniques. ● Some workshops related to safety are also conducted for the lower-level management. ● Workshops are conducted to train the employees like Rescue 1122; trainings are conducted frequently. ● Middle management employees are bound to attend seminars and conferences for meeting the project requirements. ● Most safety training is conducted for site managers and labourers for the awareness of these policies to avoid conflict issues that arise on the construction sites & are also conducted to save the employees from accidental issues. |
|--|---|---|

Themes

<p>Cost escalations as a result of changes in policies, taxes and budgetary requirements</p>	<p>Customer satisfaction, one of the prime project objectives</p>	<p>Ensuring policy awareness for employees working on projects</p>
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Codes

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Table 1 continued

<p>Codes:</p> <ul style="list-style-type: none"> ● Project cost is compromised. ● Change in-state market situations, inflations, increase in dollar prices cause cost overruns, so reevaluation of the project is needed. ● Change in institutional policies in government departments like revised increased taxes; for this reason, the company is needed to pay extra taxes. ● Procurement cost and taxation are affected directly when changes in the institutional environment occur. ● The budget increased, and so did the cost of the project. ● Management is bound to pay the management reserves cost overruns, but this is not a solution. ● Vital planning and proper risk analysis are needed to avoid such cost escalations. 	<p>Codes:</p> <ul style="list-style-type: none"> ● Customers are satisfied with our working conditions and environment. ● Customer care is one of our core objectives. ● Stakeholders and our clients are ready to work with us time and again. ● Our companies provide the best quality services to the customers. ● Our main client is the government of Pakistan. ● International standards are followed to meet the customer requirements and expectations. 	<p>Codes:</p> <ul style="list-style-type: none"> ● Code of conduct by the Pakistan Engineering council is given to the employees. ● The firm arranges the discussion sessions for policy awareness. ● Middle-level managers are bound to inform the lower management if any change or update occurs in the governmental and inter-organisational policies, rules and regulations. ● Weak HR policies. ● Hiring is mainly based on a referential basis. ● Information regarding policies is routed through emails, memos, and personal interactions.
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Further, it has been observed from the above literature that the neo-institutional approach is a school of thought which can be used to analyse the individual organisation or institution, its related fields and also actors (employees) as a whole. This approach covers almost all the essential elements of the external and internal environment, not only the rules, regulations, policies, procedures, permissions, authorities by the present government but also the administration of the respective firm and emphasises the actors to comply according to these practices. It also covers the role of cultural values, norms, and ethics, which shapes the internal and external organisation’s social environment and forces actors to respond. Also, this approach plays a vital role in explaining the organisation’s cognitive elements as to how the organisation perceives its internal and external environment and behaves or tries to behave according to that.

An excellent, competent project manager needs to understand the importance and significance of neo-institutional factors to understand the project’s environment. The realisation of the neo-institutional approach helps the higher management of the firm in making better and sound policies for the employees. It also contributes to making more accessible guidelines for the project operations.

By implementing these comprehensive policies and quality standards, a project manager understands the internal and external environment for smooth project operations. As neo-institutional lens in past researches emphasised the internal and external environment as an essential element. This approach is also widely studied in social, political and economic studies. The project also has the same relative elements economical (financial, cost, budget), social (code of conduct, values, ethics), and political (rules, regulations, policies) urges the need to explore the neo-institutional approach.

Also, this approach helps project managers and higher management to make informed decisions as the neo-institutional theory also widely talks about communication management, knowledge sharing, and stakeholder's engagement. For the better performance of the projects, communication also plays an essential and significant part when it comes to talking about the costing, schedule, quality standards, client satisfaction, resolving site differences, and applying the environmental safety policies. This sums up all that considering institutional environmental factors based on the neo-institutional approach is much more imperative when measuring the performance of the projects in the construction sector of Pakistan. Developing countries like Pakistan need to make sound and friendly policies for all the participants affected by the project's outcome. Pakistan has no better financial system and legal framework to secure the project's institutional environmental factors illustrated by the neo-institutional approach.

CONCLUSION

An institutional approach is meaningful to study the construction sector's environmental scenario in broader terms. It helps project managers in the process of decision-making not only at the strategic level but the workers as well who are engaged in the same process, including their norms and behavioural terms. Every person involved in civil infrastructure systems gets valuable information about the internal & external forces that exert pressure and enforce actors (workers/employees) to change. This adaptive behaviour of actors is essential for viable and effective project operations (Scott, 2012). The study discloses that different institutional pressures have a different impact on the construction project performance. These factors pressure the actors attached with the construction firms and need to be changed or modified according to the factors causing impact.

First, thematic analysis shows that institutional environmental factors have the most significant impact on the performance of construction projects. Coercive and normative pressures have the most significant impact on the

construction project performance; mimetic pressures have less impact on the performance of construction projects. Secondly, results show that institutional environmental policies are somehow flexible in the construction firms, but some policies pressure the employees and workers in the organisation. Managers & employees are also included in the decision-making process. Thirdly, external environmental pressures are beyond the control of the management of construction firms despite they foresee the issues in the initiation stage of projects. However, these pressures are still out of their control, and they need to manage according to the external change forces.

Moreover, the result shows that risks attached to these institutional environmental policies are assessed in the planning phase of the construction projects. However, still, there is an absence of a proper legal framework in Pakistan. The study results are beyond the expectations; the current study shows that some construction companies in Lahore, Pakistan, are more organised and follow proper rules, regulations, policies, and norms. These construction companies' employee shares their values and adapts to changes according to institutional environmental policies. The results also showed that these construction firms are more concerned about the best performance of their projects within time delivery of projects projected cost. They take care of their quality standards and see customer satisfaction as necessary above all.

Experimental results showed that institutional environmental factors positively impact the performance of construction projects. This is likely due to the understanding of institutional environmental factors necessary for the construction firms and their policymakers to make policies while considering the pressures and forces which try to stop or require changes in the construction projects. This study has a few limitations. Firstly, the data was collected from the top leading, and most organised construction firms in Lahore, Pakistan, who consider IEF the most crucial factor before initiation of construction projects and have enough resources to implement these. However, future research can be conducted on small construction firms as well. Second, this research is conducted in Lahore, Pakistan construction firms specifically. Future research studies can compare these results with other countries for more surprising and exciting results.

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