Cross-Cultural Project Governance in Fiber Infrastructure Projects in Nigeria: Communication, Field Knowledge, and Accountability

Felixta Chioma Onyenwe, Azubuike Uzochukwu Tochi, Jennifer Oghenetejiri Ekpite, Joy Amuche Mamah, Uchechi Joyce Nneji, Olumba Confidence Chigozirim, Onyinye Uzoamaka Okafor, Nneji Richard Iherorochi, Ukwuoma Kingdom Chidi.
Department of Theatre and Film Studies,
Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.
Department of Computer Engineering,
Michael Okpara University of Agriculture, Umudike Abia State.
Department of Mass Communications,
University of Nigeria, Nsukka.
Department of Electronic Engineering,
University of Nigeria, Nsukka.
College of Humanities and Law,
Chengdu University of Technology China.
Computer Science and Cyber Security,
Chengdu University of Technology.
Department of Educational Psychology; Guidance and Counselling
University of Port Harcourt.
Department of Petroleum and Natural Gas Engineering,
Chengdu University of Technology, China.
Department of Medical Laboratory Sciences,
University of Nigeria, Nsukka.
https://doi.org/10.56201/ijssmr.vol.12no10.2026.pg171.188

Abstract
Cross-cultural project management research has examined communication, leadership, and cultural differences in multinational project environments, but less attention has been given to how organizational communication structures shape the movement of field knowledge and accountability across culturally differentiated project groups. This study examines that interface in fibre infrastructure deployment in Nigeria. Using an interpretive qualitative case study design, the study draws primarily on an open-ended questionnaire completed by 23 Nigerian project practitioners, supplemented by contemporaneous field notes. Reflexive thematic analysis identified recurring patterns concerning communication and coordination, field knowledge and planning, escalation and accountability, and informal adaptation. The findings do not indicate that cultural differences itself uniformly produce project difficulty. Instead, participants' accounts suggest that the consequences of cross-cultural differences are mediated by the organizational arrangements through which information, authority, and field knowledge move between management and field levels. The study proposes the concept of intermediary communication architecture to describe this interface and interpret field knowledge as a project governance resource. Accountability asymmetry is treated as an analytical construct rather than an independently verified organizational condition. The study contributes to cross-cultural project management research by linking cultural differences with communication architecture, situated expertise, and accountability processes. Practical

implications concern contextual information verification, field informed planning, escalation quality, documentation, and boundary spanning capability. The study is limited by its single case design, predominantly Nigerian perspective, and insider researcher position.

Keywords: *cross-cultural project management; project governance; fibre infrastructure; Nigeria; communication architecture; field knowledge; accountability; boundary spanning*

1. Introduction

International projects bring together participants who may differ in national culture, professional background, organizational position, and assumptions about how work should be communicated and coordinated. These differences become particularly consequential in infrastructure projects, where strategic decisions are translated into physical implementation across dispersed sites. Cross-cultural project management research has consequently examined communication, leadership, trust, decision-making, and cultural intelligence as important dimensions of project performance (Anglani et al., 2023; Babatunde & Low, 2015). Yet a substantial part of project delivery occurs at an operational interface that is less visible in high level accounts: the point at which field knowledge is transmitted upward, managerial decisions are translated downward, and implementation conditions are communicated across organizational boundaries. The present study examines this operational interface in fibre infrastructure deployment in Nigeria involving a Chinese linked telecommunications organization. The study focuses on Nigerian project practitioners' experiences of working across management and field levels. The organization is not evaluated as a whole, and the analysis does not treat Chinese or Nigerian professionals as homogeneous groups. Instead, the study asks how cultural differences interact with communication structures, planning processes, escalation, and accountability in a particular project environment.

This distinction is important because cultural differences do not operate independently of organizational design. Project information may pass through several roles before reaching a decisionmaker, and field conditions may require interpretation as information moves between technical, administrative, and managerial levels. Recent project management research on situated expertise and boundary spanning similarly emphasizes that knowledge is distributed across project participants and that effective project organizing depends on mechanisms that connect otherwise separated expertise systems (Korotkova et al., 2024; Satheesh et al., 2024; Vosman et al., 2024).

The study therefore proposes the concept of intermediary communication architecture: the set of organizational arrangements through which project information, field knowledge, instructions, and escalation move between project management and implementation levels. The concept does not assume that intermediary roles are dysfunctional. Rather, it directs attention to whether relevant contextual information remains sufficiently visible and interpretable as it crosses organizational boundaries.

Three research questions guide the study:

RQ1. What forms of cross-cultural and organizational friction do Nigerian project practitioners report in Chinese linked fibre infrastructure deployment?

RQ2. How do participants perceive these friction points as affecting project communication, planning, delivery, and accountability?

RQ3. What adaptive strategies do Nigerian practitioners develop in response to these conditions?

The study makes three contributions. First, it adds field level evidence to cross-cultural project-management research in an underexamined Nigerian infrastructure context. Second, it proposes

intermediary communication architecture as a mechanism through which cultural difference may become operationally consequential. Third, it connects situated field knowledge with project governance and accountability, suggesting that the quality of accountability processes may depend partly on how effectively project information retains context as it moves across organizational levels.

The paper proceeds by reviewing the literature and identifying the gap, setting out the theoretical framework, describing the qualitative methodology, presenting the findings, discussing their implications, and concluding with practical recommendations and directions for future research.

2. Literature Review

2.1 Cross-cultural project management

Cross-cultural project management scholarships have established that international projects require capabilities beyond technical project competence. Cultural intelligence, communication, trust, and adaptation become particularly important when project teams operate across national and organizational boundaries (Anglani et al., 2023). Research on Chinese construction firms in Nigeria likewise demonstrates that cultural differences can intersect with quality management and project practices (Babatunde & Low, 2015).

However, a recurring limitation in cross-cultural research is the tendency to move rapidly from national cultural characteristics to individual behaviour. Such an approach can obscure the organizational mechanisms through which cultural differences become consequential. The present study therefore treats culture as one component of a wider project environment rather than as a sufficient explanation.

The Nigerian setting adds a further contextual layer. Research on China's Belt and Road Initiative has asked whether it represents a paradigm shift or a repackaging of failed ventures in Nigerian infrastructure development (Ajah & Onuoha, 2025), and work on Chinese companies in the Nigerian construction industry since 1999 has examined the issues and contentions surrounding their operations (Boge, 2024). This contextual literature frames the setting of the present study, which complements it by focusing on the project level interface between management and field levels.

2.2 Communication, coordination, and boundary work

Project communication is not simply the transfer of messages. It involves interpretation, timing, context, trust, and coordination of interdependent work. Research on project communication has shown that information asymmetry can affect cooperation and control, while recent project studies emphasize the role of boundary work in enabling flows across interdependent organizational boundaries (Vosman et al., 2024). Related work asks whether project managers' soft skills foster knowledge sharing (Avença et al., 2024).

Boundary spanning research is particularly relevant to the present study. Kier et al. (2023) show, in a hospital renewal case, how project delivery professionals use ideology and inquiry to engage organizational participants across the temporary-permanent boundary, while Shi et al. (2023) examine coordination roles and interorganizational systems as boundary spanning mechanisms for knowledge integration in digital innovation. These studies suggest that coordination roles can create value when they enable knowledge to travel across otherwise separated groups.

2.3 Situated expertise and field knowledge

Recent project research increasingly recognizes that expertise is situated rather than distributed evenly across formal organizational roles. Korotkova et al. (2024) show that open situated-expertise systems depend on structural design, interaction routines, roles, and digital boundary

objects. Satheesh et al. (2024) similarly find that boundary spanning configurations vary with project conditions and complexity.

These findings provide a useful basis for understanding infrastructure deployment, where field personnel encounter implementation conditions that may not be fully represented in upstream planning. The literature therefore supports treating the transmission of field knowledge as a project organizing issue rather than simply an operational communication problem.

2.4 Project governance, accountability, and information

Project governance concerns the structures and practices through which projects are directed, controlled, and held accountable. Research on governance mechanisms indicates that contractual, relational, and governmental mechanisms can interact in shaping governance performance (Luo et al., 2025). Research on African infrastructure megaprojects similarly identifies governance, performance management, and accountability as central areas of concern (Sekasi et al., 2024). Other recent studies show that governance is dynamic. Bourne et al. (2023) argue that goals and governance can move as project environments change, while Benitez-Avila and Hartmann (2023) show how managerial agencies can reproduce or alter project governance structures. These perspectives reinforce the need to examine project governance as something enacted through information, decisions, roles, and interactions rather than as a static organizational chart. Evidence on governance spans several settings and methods. A systematic review of governance mechanisms in megaprojects (Alqershy et al., 2025), a study of how housing megaprojects are governed in a South African metropolitan area (Mokoena et al., 2025), and agency theoretic work on how monitoring and evaluation affect the impact of international development projects (Amin et al., 2024) illustrate that governance and information arrangements are examined across diverse project contexts.

2.5 Research gap

The literature reviewed here shows that cross-cultural communication, situated expertise, boundary spanning, and project governance are established areas of research. What remains less developed is an integrated account of how these mechanisms interact at the operational interface of a culturally diverse infrastructure project.

Specifically, less attention has been given to how organizational communication and decision-making structures shape the movement of field knowledge, participation, and accountability across culturally differentiated project groups. The present study addresses this gap by examining the Nigerian practitioner perspective on a Chinese linked fibre infrastructure context and by developing intermediary communication architecture as a mechanism linking cultural difference with project governance processes.

3. Theoretical Framework

3.1 Theoretical orientation

The study adopts a relational and organizational view of cross-cultural project management. National-cultural frameworks are used as sensitizing concepts rather than deterministic explanations of behaviour. Hofstede et al. (2010), Meyer (2014), and Trompenaars and Hampden-Turner (2012) provide established vocabulary for considering differences in communication, authority, feedback, decision-making, and relationship orientation. However, these dimensions do not explain how information moves through specific project organizations by themselves. Recent project management research reinforces the importance of contextualizing cultural capability within project structures. Anglani et al. (2023), for example, link cross-cultural capability with the digitally mediated environment in which contemporary projects operate. The implication for this study is that cultural difference should be examined

alongside the organizational arrangements that determine who communicates with whom, which information is considered decision relevant, and how field knowledge reaches planning and governance processes.

3.2 Intermediary communication architecture

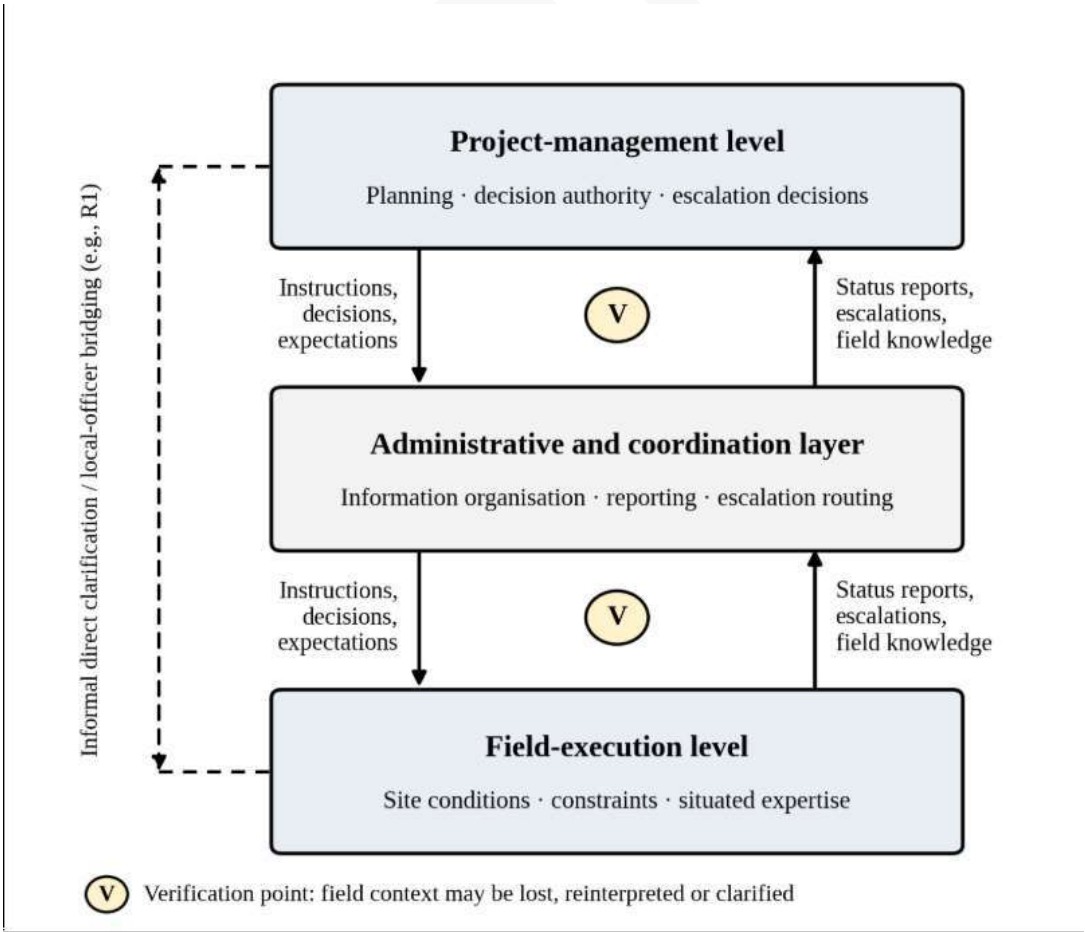
The central analytical concept is intermediary communication architecture. It refers to the organizational pathways through which information and escalation move between project management and field execution levels. In the study context, administrative and coordination personnel supporting project management roles formed part of this interface. Such roles can perform legitimate coordination functions, including information organization, administrative support, reporting, and escalation routing.

The analytical issue is therefore not whether intermediaries exist, but how information behaves as it passes through them. Where project information is highly contextual, time-sensitive, or technically complex, additional clarification or verification may be required to preserve meaning. This interpretation is consistent with project research emphasizing boundary work, distributed knowing, and knowledge integration across project boundaries (Kier et al., 2023; Shi et al., 2023; Vosman et al., 2024).

Figure 1 presents the interface schematically. It is a conceptual illustration of the pathways described above and does not represent measured information flows.

Figure 1

Intermediary Communication Architecture Between Project Management and Field Execution Levels



Note. Conceptual schematic based on the study's framework and the organizational context observed by the researcher. The informal bridging path reflects one participant's account (R1).

It is not an empirical measurement.

Field knowledge and situated expertise

Field personnel possess situated expertise generated through direct interaction with physical sites, communities, implementation constraints, resources, and deviations from initial plans. Korotkova et al. (2024) show that situated expertise in complex projects depends on the permeability of expertise boundaries and on interaction routines and roles that allow knowledge to move across those boundaries. Satheesh et al. (2024) similarly identify boundary spanning roles as important under conditions of project complexity.

For the present study, field knowledge is therefore conceptualized as a project governance resource. It is not simply an operational input received after planning. Its value lies in its potential to inform planning, decision-making, escalation, risk interpretation, and accountability.

3.3 Accountability and information quality

Accountability is treated as a governance process rather than merely as the allocation of responsibility after an event. Project accountability depends on information about expectations, decisions, implementation status, constraints, authority, and evidence. Research on African infrastructure megaprojects identifies governance and accountability as central dimensions of project performance (Sekasi et al., 2024), while recent research shows that digital technologies can alter how visibility and accountability are produced in projects (Zhang, 2024).

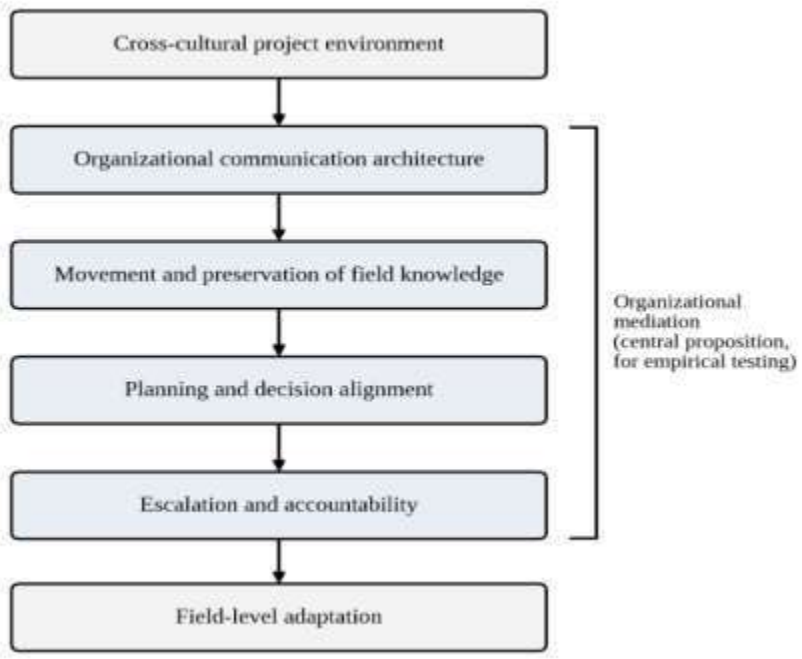
The study uses accountability asymmetry as an analytical construct for interpreting participants' perceptions that responsibility may not always be experienced as proportionate to decision authority or access to information. The construct is not treated as an independently verified organizational characteristic.

3.4 Integrated conceptual framework

The framework developed in this study proposes the sequence shown in Figure 2.

Figure 2

Integrated Conceptual Framework of Cross-Cultural Project Governance



Note. Conceptual framework developed in this study (Section 3.5). The sequence is a

proposition for further empirical testing, not a causal claim established by the study.

The central proposition is: The project governance consequences of cross-cultural differences are likely to be shaped not only by cultural orientations but by the organizational structures through which field knowledge, information, decision authority, and accountability are exchanged. This is a proposition for further empirical testing, not a causal claim established by the present study.

4. Methodology

4.1 Research design

The study adopts an interpretive qualitative case study design. Case study methodology is appropriate where the researcher seeks to examine a contemporary phenomenon within its real-world context and where the boundaries between phenomenon and context are not easily separated (Yin, 2018). The study focuses on cross-cultural project governance in fibre infrastructure deployment in Nigeria, with particular attention to communication, field knowledge, planning, escalation, and accountability.

4.2 Data sources

The primary empirical source was an open-ended questionnaire completed by 23 Nigerian project practitioners with direct experience working with Chinese project managers. The questionnaire included open-ended questions concerning communication, cultural differences, challenges, adaptive responses, and perceptions of project management. Some closed-ended rating responses contained multiple values and were therefore not treated as a valid quantitative scale; the analysis is consequently qualitative rather than statistical.

The questionnaire data were supplemented by contemporaneous field notes from project activities and meetings and by contextual discussions with Nigerian project-management personnel, including Regional Project Managers. These contextual discussions comprised informal one-to-one conversations as well as discussions and comments arising during project meetings and field activities. These discussions are represented in the study through the researcher's contemporaneous field notes and are used only as contextual, paraphrased evidence. No verbatim quotation is attributed to them.

4.3 Recruitment and participant relationship

Questionnaire participants were colleagues of the researcher. None was a direct subordinate of the researcher. Participants were contacted individually, informed of the academic purpose of the research, and invited to participate voluntarily. The Regional Project Managers who contributed contextual perspectives did not complete the questionnaire.

4.4 Researcher positionality

The researcher occupied an insider position in the project environment. Insider research can provide access to organizational context and tacit knowledge while simultaneously introducing risks associated with preunderstanding, role duality, organizational politics, and interpretation (Brannick & Coghlan, 2007). The study addressed these risks by distinguishing participant accounts from researcher interpretation, maintaining analytical separation between questionnaire data and field notes, retaining divergent cases, and avoiding claims that exceeded the available evidence.

4.5 Data analysis

The questionnaire material was analyzed using reflexive thematic analysis, drawing on Braun and Clarke's (2006, 2022) approach. Analysis involved familiarization with the responses, generation of descriptive codes, development and review of candidate themes, definition of

themes, and interpretation in relation to the research questions and theoretical framework. Braun and Clarke's (2025) reporting guidance was also considered in presenting the qualitative analysis. Descriptive codes were distinguished from theoretical constructs. For example, communication gaps and limited local input are descriptive patterns in the questionnaire, whereas intermediary communication architecture and accountability asymmetry are analytical interpretations developed through engagement with the literature. Reporting considered the Standards for Reporting Qualitative Research (O'Brien et al., 2014). The COREQ checklist (Tong et al., 2007), which was developed for interviews and focus groups, was not applied because the primary data are written questionnaire responses.

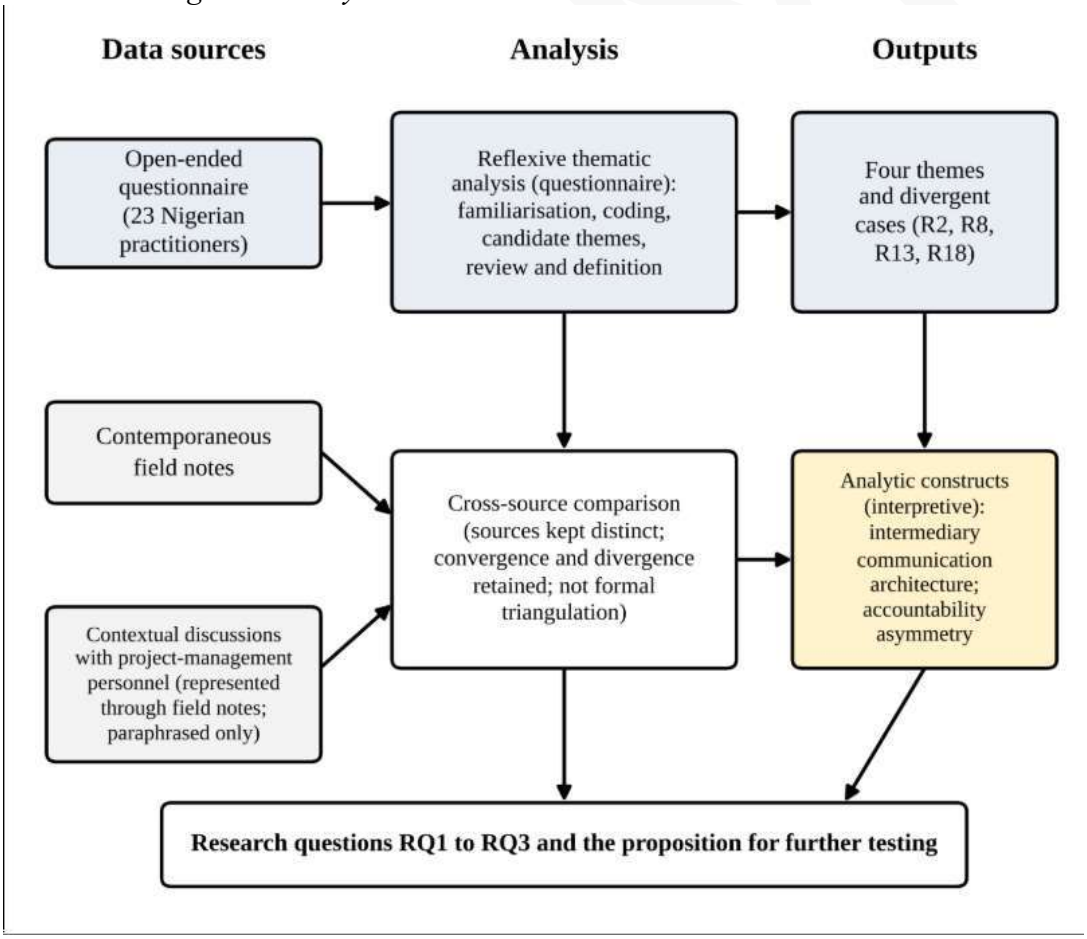
4.6 Cross-source comparison

The study compares questionnaire responses with field notes and contextual management discussions while keeping the sources analytically distinct. Where accounts converged, the convergence was considered supportive contextual evidence. Where they differed, the difference was retained rather than resolved artificially. The study therefore uses the term cross-source comparison rather than claiming formal methodological triangulation.

Figure 3 summarizes the data sources, the analytic steps, and the cross-source comparison.

Figure 3

Research Design and Analytic Process



Note. Questionnaire data were analyzed using reflexive thematic analysis. Field notes and contextual discussions were compared with the questionnaire themes but kept analytically distinct.

4.7 Ethics and confidentiality

Participation was voluntary. All participants took part willingly, and the purpose of the research was fully disclosed to them before they responded. Participants were also informed that identifying information would not be reported. The manuscript uses generalized participant descriptors and does not report personally identifying information.

4.8 Limitations of the design

The design has four principal limitations. First, it provides predominantly Nigerian practitioner perspectives and therefore does not constitute a bilateral account. Second, it concerns a single organizational/project context and cannot establish generalizability across Chinese companies, Nigerian organizations, or infrastructure projects. Third, the qualitative dataset does not support statistical prevalence claims. Fourth, the insider position and the reliance on the researcher's own field notes for the contextual management discussions constrain independent verification of some contextual material. These limitations are incorporated into the interpretation rather than treated as grounds for causal inference. In addition, the sample is concentrated among early career practitioners (17 of 23 reported 1–3 years of project delivery experience), whose perspectives on management decision-making may differ from those of more senior staff.

5. Findings

5.1 Participant profile

Twenty-three Nigerian practitioners participated in the questionnaire. Experience was concentrated in the 1–3-year category: 17 participants reported 1–3 years of project-delivery experience, three reported less than one year, two reported 4–7 years, and one reported 8–10 years. All participants reported direct working experience with Chinese project managers. The findings represent participant perceptions and experiences rather than an assessment of Chinese project managers as a professional group or of the focal organization.

Table 1 summarizes participants' project-delivery experience.

Table 1

Participants' Project-Delivery Experience (N = 23)

Experience category	n	%
Less than 1 year	3	13.0
1–3 years	17	73.9
4–7 years	2	8.7
8–10 years	1	4.3
Total	23	100

Note. All participants reported direct working experience with Chinese project managers. Percentages are rounded.

5.2 Communication and coordination across project levels

Communication and coordination emerged as a recurring concern. The responses suggest that the issue was not simply whether communication existed, but how information moved between project management and field execution levels.

> *"They barely get involved with us in the field. They just give orders."*
> (R1, Engineer, 1–3 years' experience)
>
> *"Mostly communication [gap] and de-localized decision making."*
> (R22, Engineer/Project Coordinator, 1–3 years' experience)

R20 similarly reported that "Sometimes decisions are made without sufficient local input…" These responses indicate a perceived distance between field level implementation and higher-level decision-making. They do not establish that communication was systematically ineffective. In the project environment observed by the researcher, Personal Assistants supporting project managers performed important administrative and coordination functions. Project information and escalation could move through this administrative coordination layer. The presence of an intermediary layer was not itself treated as a deficiency. The governance question is how effectively field context is preserved as information moves through multiple levels.

5.3 Field knowledge and participation in planning

Participants described situations in which decisions or implementation expectations did not always appear sufficiently informed by local implementation conditions. The findings suggest that field personnel possess knowledge generated through direct engagement with project sites, communities, physical infrastructure, and implementation constraints.

One questionnaire account described work being reported as "almost complete" while subsequent site inspection indicated that substantial work remained. This should not be interpreted as evidence of intentional misreporting. It illustrates a potential status verification problem in which progress descriptions may acquire different meanings at different reporting levels. Field notes provide additional context. During a project discussion, a Regional Project Manager emphasized the importance of verifying field conditions before escalating implementation concerns and encouraged field personnel to communicate upward when actual conditions diverged from planned activities. The observation suggests that effective escalation depends not only on the existence of reporting channels but also on the contextual completeness of the information transmitted through them.

5.4 Escalation, accountability, and delivery pressure

"They are the only ones allowed to make mistakes."
(R21, Engineer, 1–3 years' experience)

The statement represents a participant's perception of unequal tolerance for error. It should not be treated as evidence that accountability was objectively or systematically unequal.

"The only challenge is the fire brigade approach to work."
(R14, Engineer, 1–3 years' experience)

Because this statement comes from the questionnaire, it is presented as the respondent's characterization rather than as the researcher's characterization of project operations.

Field observations provide an important counterpoint. The Regional Project Manager discussion recognized escalation as necessary but emphasized verification of field conditions before escalation. The same discussion emphasized the responsibility of field personnel to communicate upward when delays, deviations, or implementation problems occur. The findings therefore point toward the quality and contextual completeness of escalation rather than escalation itself as the relevant governance issue.

5.5 Documentation and visibility of field work

Field observation also highlighted the role of documentation in maintaining visibility of project implementation. Where information is generated at several levels, differences in how activities are described may affect the visibility of completed work and the traceability of implementation responsibilities. This does not imply intentional misrepresentation. It suggests that documentation is itself a governance mechanism because it provides a common reference point for planned activity, actual activity, constraints, status, and responsibility.

5.6 Informal adaptive strategies

"Always ask questions for clarity to be 100% sure of the tasks and the way to go about it."
(R14, Engineer, 1–3 years' experience)

"The middleman gap was filled by a higher local officer."
(R1, Engineer, 1–3 years' experience)

"You listen to them when they are giving instruction even when you have an opinion or idea and share later."
(R19, Project Coordinator, 1–3 years' experience)

"The goal is not to eliminate cultural differences but to leverage them effectively."
(R22, Engineer/Project Coordinator, 1–3 years' experience)

These responses indicate that practitioners developed proactive clarification, local coordination, communication sequencing, and relationship-based adaptation. They also provide a constructive counterpoint to the more critical responses by showing that cultural difference was not uniformly perceived as a problem.

5.7 Negative and divergent cases

The questionnaire included divergent responses. R2 indicated that a negative experience was not related to cultural difference. R8 repeatedly reported no substantive challenge. R13 reported little or no challenge while working with Chinese managers, while R18 reported that they had not experienced cultural differences in their workplace. These cases constrain the interpretation of the study and demonstrate that the recurring themes should not be treated as universal characteristics of cross-cultural project work.

5.8 Cross-source synthesis

Across the questionnaire and supporting field evidence, four observations are most defensible: communication was a recurring concern; field knowledge was viewed as relevant to planning and implementation; escalation was recognized as necessary but dependent on contextual information; and practitioners developed informal strategies to maintain project continuity. The evidence therefore supports a mediated interpretation in which organizational communication structures influence how cultural differences become operationally consequential.

Table 2 summarizes the four themes, the evidence cited for each, and the research question each informs. Respondents listed are those quoted or cited in this section; counts of participants per theme are not reported because the analysis is qualitative.

Table 2

Themes, Supporting Evidence, and Linked Research Questions

Theme	Pattern in the data	Evidence cited	RQ
Communication and coordination across project levels	Perceived distance between field implementation and higher-level decision-making; administrative coordination layer observed by the researcher	R1, R20, R22; field notes	RQ1, RQ2
Field knowledge and planning	Site-generated knowledge not always visible in decisions; status descriptions (e.g., "almost complete") carrying different meanings across reporting levels	One questionnaire account; Regional Project Manager discussion (field notes, paraphrased)	RQ1, RQ2

Escalation and accountability	Perceived unequal tolerance for error; delivery pressure; emphasis on verified, contextually complete escalation; documentation as a governance mechanism	R21, R14; field notes	RQ2
Informal adaptation	Proactive clarification, local coordination, communication sequencing, and relationship-based adaptation	R14, R1, R19, R22	RQ3
Divergent cases	Little or no reported cultural difficulty, or difficulty not attributed to culture	R2, R8, R13, R18	RQ1, RQ2 (boundary)

Note. RQ = research question. Extracts illustrate patterns and are not prevalence estimates.

6. Discussion

6.1 From cultural difference to organizational mediation

The findings support an interpretation of cross-cultural project management that moves beyond treating national culture as a direct predictor of project behaviour. Hofstede et al. (2010), Meyer (2014), and Trompenaars and Hampden-Turner (2012) remain useful as sensitizing frameworks, but the present evidence indicates that cultural difference alone does not sufficiently explain the observed patterns. The questionnaire contains both critical and positive accounts, while field observation shows that project management personnel themselves recognized the importance of field verification and upward communication.

The more useful question is therefore how culturally differentiated groups interact through organizational structures that determine how information, authority, field knowledge, and accountability move across project levels. This reframing reduces cultural essentialism and places attention on project-governance mechanisms.

6.2 Intermediary communication architecture

The concept of intermediary communication architecture describes the organizational pathways through which project information and escalation move between decision-making and implementation levels. The intermediary layer is not inherently dysfunctional. It can organize information, support management, maintain reporting structures, and facilitate escalation. The governance issue arises where information loses contextual detail; direct clarification becomes difficult, or field knowledge does not reach the decision point at which it is needed. This interpretation connects the study to research on boundary work and distributed expertise. Vosman et al. (2024) show that boundary work is needed across interdependent project boundaries, while Shi et al. (2023) examine coordination roles and boundary objects as mechanisms for knowledge integration. The present study extends this discussion by focusing on the preservation of field context as information moves through administrative coordination layers.

6.3 Field knowledge as a project-governance resource

Field engineers possess situated expertise generated through direct interaction with project sites and implementation conditions. Korotkova et al. (2024) demonstrate that situated expertise depends on permeable expertise boundaries, interaction routines, roles, and digital boundary objects. Satheesh et al. (2024) similarly identify boundary-spanning configurations as important in complex infrastructure projects.

The present findings support treating field knowledge as a governance resource. Its value depends not only on whether field personnel possess relevant knowledge but also on whether mechanisms exist for that knowledge to be communicated, verified, incorporated into planning, and considered in decisions.

6.4 Accountability as an information problem

The questionnaire contains perceptions that responsibility and tolerance for mistakes were not always experienced equally. However, the study cannot independently verify the organizational distribution of responsibility. The stronger analytical contribution is to connect accountability with information quality. Accountability decisions depend on what was expected, what occurred, what constraints existed, who had authority, when deviations became visible, and what information was available at each decision point.

6.5 Informal adaptation as field-level governance

The adaptive strategies identified in the questionnaire show that practitioners actively make project systems workable. Clarification, local coordination, communication sequencing, and relationship-building can compensate for information gaps and help practitioners interpret ambiguous instructions. However, reliance on informal adaptation may also create dependence on particular individuals and tacit knowledge. The study therefore distinguishes between informal adaptation as field-level resilience and formal governance as repeatable organizational capability.

6.6 Cross-cultural project-management implications

The findings do not suggest that cultural awareness training is irrelevant. Rather, cultural capability may be more effective when embedded within appropriate organizational structures. Practical cross-cultural capability should include contextual communication, boundary spanning, information verification, and participatory planning. This moves the discussion from generic cultural awareness toward organizationally embedded cultural capability.

6.7 Theoretical contribution

The study makes three linked theoretical contributions: it proposes intermediary communication architecture as a mechanism through which cultural difference may become operationally consequential; it positions field knowledge as a project governance resource; and it conceptualizes accountability asymmetry as potentially information dependent. Together, these contributions support the proposition that project governance consequences of cross-cultural differences are shaped not only by cultural orientations but by the organizational structures through which field knowledge, information, decision authority, and accountability are exchanged.

6.8 Overall interpretation

The evidence indicates that cultural differences form part of the project environment, but organizational communication architecture influences how those differences are translated into planning, information exchange, escalation, accountability, and adaptation. This mediated relationship is the principal analytical contribution of the study.

7. Recommendations

7.1 Strengthen field-to-management information verification

Existing administrative coordination structures need not be removed. Instead, mechanisms can be established for contextual clarification when information is ambiguous, time-sensitive,

disputed, or likely to influence an important decision. The objective is to complement, not bypass, established coordination roles.

7.2 Integrate field knowledge into planning

Planning processes can include structured opportunities for field personnel to identify site constraints, community considerations, implementation dependencies, resource requirements, access limitations, and deviations from planning assumptions. This converts field knowledge from reactive escalation material into a proactive planning input.

7.3 Strengthen escalation quality

Escalations can distinguish between implementation delay, resource constraint, planning mismatch, technical issue, communication issues, external/site constraint, and accountability concern. Including context before responsibility is assigned can improve the quality of governance decisions.

7.4 Improve implementation documentation

Consistent documentation of planned activity, actual activity, status, constraints, responsible team, evidence of completion, outstanding dependencies, and next action can improve traceability and reduce ambiguity across reporting levels.

7.5 Develop boundary-spanning capability

Personnel with both field experience and coordination capability can support translation between management expectations and field realities. The objective is not necessarily to create another hierarchy but to strengthen the project's capacity to move knowledge across boundaries.

7.6 Develop context-specific cross-cultural capability

Cross-cultural onboarding should focus on practical project behaviours: requesting clarification, communicating disagreement constructively, escalating implementation constraints, documenting deviations, and incorporating local knowledge into planning. This treats cultural competence as an operational project management capability.

7.7 Institutionalize effective informal adaptation

Where proactive clarification, local coordination, or other informal practices demonstrably improve delivery, these can be captured through lessons learned, onboarding, or project guidance. The objective is to convert valuable individual resilience into transferable organizational learning.

Table 3 maps each practical recommendation to the finding it addresses.

Table 3

Recommendations Mapped to Findings

Recommendation	Finding addressed	Intended effect
7.1 Verify field-to-management information	Communication and coordination (5.2); status verification (5.3)	Preserve context where information is ambiguous, time-sensitive, or disputed
7.2 Integrate field knowledge into planning	Field knowledge and planning (5.3)	Turn reactive escalation material into proactive planning input
7.3 Strengthen escalation quality	Escalation and accountability (5.4)	Separate delay, resource, planning, technical,

		communication, external, and accountability issues
7.4 Improve implementation documentation	Documentation and visibility (5.5)	Provide a common reference for planned and actual activity, status, and responsibility
7.5 Develop boundary-spanning capability	Communication (5.2); field knowledge (5.3)	Strengthen translation between management expectations and field realities
7.6 Develop context-specific cross-cultural capability	Communication (5.2); informal adaptation (5.6)	Embed cultural capability in practical project behaviours
7.7 Institutionalize effective informal adaptation	Informal adaptive strategies (5.6)	Convert individual resilience into transferable organizational learning

Note. Section numbers refer to the Findings and Discussion sections of this manuscript.

7.8 Directions for future research

Bilateral studies incorporating Chinese and Nigerian project personnel.
Comparative studies across multiple organizations or infrastructure projects.
Longitudinal research examining how communication architecture changes over the project life cycle.
Mixed-method research testing relationships among communication architecture, field knowledge integration, and project performance.

8. Conclusion

8.1 Restating the problem

This study examined cross-cultural project governance in fibre infrastructure deployment in Nigeria from the perspective of Nigerian project practitioners. The findings indicate recurring concerns around communication, participation in planning, field knowledge, escalation, accountability, and informal adaptation, while also documenting divergent experiences in which participants reported little or no cultural difficulty.
The study therefore does not support the conclusion that cross-cultural differences inherently produce project problems. Instead, the findings suggest that the consequences of cultural differences are mediated by the organizational arrangements through which information and authority move between project management and field levels.

8.2 Main contribution

The central contribution is the concept of intermediary communication architecture. The concept directs attention away from treating intermediaries as inherently problematic and toward examining how information is transmitted, interpreted, verified, and acted upon across organizational levels. The key governance question is whether relevant field knowledge remains sufficiently visible and contextualized as it moves through the project organization.

8.3 Implications

Effective cross-cultural project governance requires more than awareness of cultural differences. It requires mechanisms that enable field knowledge to enter planning, project information to retain sufficient context, escalation to be evidence based, implementation to be documented consistently, accountability to reflect available information, and practitioners to adapt without relying entirely on informal workarounds.

8.4 Limitations and future research

The study is limited by its predominantly Nigerian perspective, single-case design, qualitative evidence base, and insider researcher position. Future bilateral, comparative, longitudinal, and mixed-method studies can test and refine the proposed mechanism.

8.5 Closing reflection

"The goal is not to eliminate cultural differences but to leverage them effectively."
(R22, Engineer/Project Coordinator)

The broader implication is that effective cross-cultural project governance depends not simply on reducing cultural difference, but on designing project systems through which people with different cultural, professional, and operational perspectives can exchange information, interpret conditions, make decisions, and connect implementation evidence with appropriate accountability processes.

Declarations

Ethics statement

All participants took part willingly and voluntarily, and the intent and purpose of the study were fully disclosed to them. Identifying information is not reported (see Section 4.7).

Data availability

The underlying questionnaire data are not publicly available because the participants were colleagues, and confidentiality was promised during recruitment. Anonymized or aggregated information may be made available where appropriate and where doing so does not compromise participant confidentiality.

Conflict of interest

The author was professionally situated within the project environment examined in this study. The author declares no financial or other competing interest that influenced the conduct, analysis, or reporting of the research.

Funding

This research received no external funding.

Originality and submission

The manuscript is original, has not been published elsewhere, is not currently under consideration by another journal, and has been approved for submission by the autho

References

Ajah, A. C., & Onuoha, J. I. (2025). China's Belt and Road Initiative and infrastructure development in Nigeria: Unveiling a paradigm shift or repackaging of failed ventures? Journal of Current Chinese Affairs, 54(2), 119–148. https://doi.org/10.1177/18681026251330645

Alqershy, M. T., Shi, Q., & Zhang, F. (2025). Exploring governance mechanisms in megaprojects: A mixed-methods systematic review. Engineering Management Journal, 37(1), 90–113. https://doi.org/10.1080/10429247.2024.2369452

Amin, H., Malik, M., & Scheepers, H. (2024). An agency theory unpacking of how monitoring and evaluation affect international development project impact. International Journal of Project Management, 42(8), 102654. https://doi.org/10.1016/j.ijproman.2024.102654

Anglani, F., Pennetta, S., Reaiche, C., & Boyle, S. (2023). Crossing digital frontiers with cultural intelligence—A new paradigm for project managers. International Journal of Project Management, 41(8), 102543. https://doi.org/10.1016/j.ijproman.2023.102543

Avença, I., Domingues, L., & Carvalho, H. (2024). Do the project manager's soft skills foster knowledge sharing? Project Leadership and Society, 5, 100139. https://doi.org/10.1016/j.plas.2024.100139

Babatunde, Y., & Low, S. P. (2015). Cross-cultural management and quality performance: Chinese construction firms in Nigeria. Springer. https://doi.org/10.1007/978-981-287-362-0

Benitez-Avila, C., & Hartmann, A. (2023). Managerial agency (re)producing project governance structure and context: Public-private partnerships in the Netherlands. International Journal of Project Management, 41(4), 102468. https://doi.org/10.1016/j.ijproman.2023.102468

Boge, F. I. (2024). Chinese companies in the Nigerian construction industry since 1999: Issues and contentions. Àgídìgbo: ABUAD Journal of the Humanities, 12(2), 501–521. https://doi.org/10.53982/agidigbo.2024.1202.35-j

Bourne, M., Bosch-Rekveldt, M., & Pesämaa, O. (2023). Moving goals and governance in megaprojects. International Journal of Project Management, 41(5), 102486. https://doi.org/10.1016/j.ijproman.2023.102486

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. Qualitative Psychology, 9(1), 3–26. https://doi.org/10.1037/qup0000196

Braun, V., & Clarke, V. (2025). Reporting guidelines for qualitative research: A values-based approach. Qualitative Research in Psychology, 22(2), 399–438. https://doi.org/10.1080/14780887.2024.2382244

Brannick, T., & Coghlan, D. (2007). In defense of being "native": The case for insider academic research. Organizational Research Methods, 10(1), 59–74. https://doi.org/10.1177/1094428106289253

Hofstede, G. H., Hofstede, G. J., & Minkov, M. (2010). Cultures and organizations: Software of the mind (3rd ed.). McGraw-Hill.

Kier, C., Aaltonen, K., Whyte, J., & Huemann, M. (2023). How projects co-create value with stakeholders: The role of ideology and inquiry in spanning the temporary-permanent boundary. International Journal of Project Management, 41(5), 102482. https://doi.org/10.1016/j.ijproman.2023.102482

Korotkova, N., Austin, J. R., & Hetemi, E. (2024). Do you know your people? Situated expertise and permeable expertise boundaries in complex project work. International

Journal of Project Management, 42(3), 102588. https://doi.org/10.1016/j.ijproman.2024.102588

Luo, L., Liu, Y., Yang, Y., Xie, J., & Wu, G. (2025). Interactive roles of megaproject governance mechanisms and their effects on governance performance. Engineering, Construction and Architectural Management, 32(9), 5943–5964. https://doi.org/10.1108/ECAM-10-2023-1081

Meyer, E. (2014). The culture map: Breaking through the invisible boundaries of global business. PublicAffairs.

Mokoena, M., Marais, L., Masithela, N., & Venter, A. (2025). Governing housing megaprojects in a South African metropolitan area: The case of Mangaung. Area Development and Policy, 10(1), 126–147. https://doi.org/10.1080/23792949.2024.2448422

O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. Academic Medicine, 89(9), 1245–1251. https://doi.org/10.1097/ACM.0000000000000388

Satheesh, S. A., Verweij, S., Busscher, T., & Arts, J. (2024). Drivers of innovation in infrastructure development projects: A configurational analysis of boundary spanning roles. International Journal of Project Management, 42(5), 102620. https://doi.org/10.1016/j.ijproman.2024.102620

Sekasi, J., Harrod, S., Andrade, V., & Madsen, J. H. (2024). Performance controls and accountability in African transport infrastructure megaprojects: A systematic literature review. Project Leadership and Society, 5, 100123. https://doi.org/10.1016/j.plas.2024.100123

Shi, Y., Cui, T., & Kurnia, S. (2023). Value co-creation for digital innovation: An interorganizational boundary-spanning perspective. Information & Management, 60(5), 103817. https://doi.org/10.1016/j.im.2023.103817

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care, 19(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Trompenaars, F., & Hampden-Turner, C. (2012). Riding the waves of culture: Understanding diversity in global business (3rd ed.). McGraw-Hill.

Vosman, L., Deken, F., & Volker, L. (2024). Boundary work in a project-based organization: Flow across interdependent boundaries in interorganizational programs. International Journal of Project Management, 42(5), 102622. https://doi.org/10.1016/j.ijproman.2024.102622

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE.

Zhang, Y. F. (2024). Too little or too much transparency? Influencing accountability in project management through the practices of using digital technologies. International Journal of Project Management, 42(6), 102636. https://doi.org/10.1016/j.ijproman.2024.102636