

Designed to Deliver

How Relationship Management
Drives Infrastructure Project Success

Foreword

Major infrastructure projects are where society builds on its ambition. They are vast, sometimes decade-long undertakings that reshape economies and the communities surrounding them. When these projects succeed, the value they create is immense.

But building within the limits imposed by their size and duration makes them among the most complex projects, and what decides whether they overcome their challenges is rarely ambition or intent. It is whether the web of contractors, suppliers, designers, and public bodies behind them can work as one toward a shared purpose.

This research reveals just how decisive those business relationships are and why managing them well is not a soft skill at the margins of delivery, but one of the key factors in determining project success.

That is why PMI joined forces with MIGSO-PCUBED and University College London: to bring together this research exploring the real-world delivery experience and the academic validation needed to give project professionals a clear set of recommendations they can act on from day one.

The recommendations in this report empower project professionals to take action on large projects where navigating complexity often separates success from failure. We explored what that looks like in practice and how you can do what the highest performers do: design your project relationships deliberately and manage them as a core delivery discipline.

The most ambitious infrastructure projects are launched to elevate our world. It is time we designed the underlying complex interactions behind them with the same purpose and ambition.



Pierre Le Manh, PMP
President & CEO
Project Management Institute

MIGSO-PCUBED Foreword

At MIGSO-PCUBED, we have the privilege of working alongside the leaders responsible for delivering many of the world's most ambitious programmes. Across infrastructure, defence, energy, transport, life sciences and government, one lesson has become increasingly clear. Projects rarely fail because organisations cannot manage cost, schedule or technical complexity. More often, they struggle because the relationships between organisations become fragmented, misaligned or adversarial.

As projects grow larger and more dependent on complex delivery ecosystems, collaboration is no longer simply a desirable behaviour. It has become a critical determinant of delivery performance. Yet whilst the profession governs cost, schedule, scope and technical risk with real discipline, the health of the relationships upon which delivery depends remains largely invisible, unmanaged and unmeasured.

This research was undertaken to change that. Working with University College London and, in this latest phase, the Project Management Institute, we set out to understand whether relational performance could be observed, measured and managed as rigorously as every other dimension of delivery.

The result makes the case for treating relationship health as a delivery risk in its own right: the risk that performance deteriorates because behaviours, incentives, governance and expectations between organisations are not aligned to shared outcomes. Just as cost, schedule and risk became established disciplines over the last fifty years, we believe the systematic management of relationships between organisations is the next.

The recommendations that follow are grounded in the experience of senior leaders on some of the most significant programmes in the UK and internationally. They can be applied immediately, not simply to improve collaboration, but to improve delivery performance itself.

We are extremely grateful to our colleagues at the PMI, University College London, and to the many industry leaders who generously shared their experience and insight. We hope this report encourages organisations to view relationships not as an intangible consequence of projects, but as one of their most valuable strategic assets.

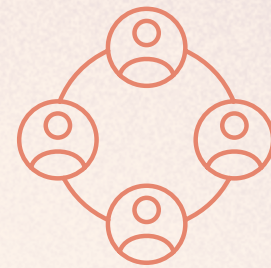


Richard Siddle

Managing Director
MIGSO-PCUBED

Executive Summary

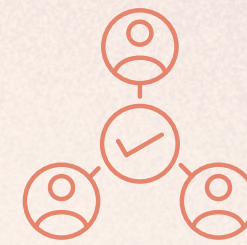
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Inter-organizational relationships are consistently overlooked in infrastructure delivery.

Major infrastructure projects are delivered through complex networks of contractors, suppliers, designers and public bodies. When relationships between these organizations are left unmanaged, the consequences are severe and well-documented: cost escalation, schedule overrun, fragmented accountability and adversarial disputes.

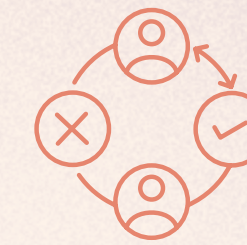
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High-performing infrastructure projects don't leave their relationships to chance; they design them with purpose.

The highest-performing infrastructure projects design inter-organizational relationships deliberately at the outset and continuously nurture them, rather than allowing them to form by default. Projects that get relationships right consistently achieve better outcomes for sponsors and stakeholders and deliver value worth the effort and expense.

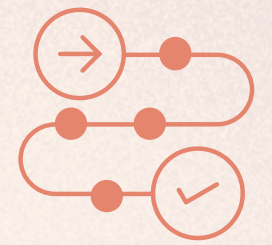
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Collaboration falls short because the system works against it.

Infrastructure projects rarely fail because organizations are unwilling to work together. They fail because structural conditions make meaningful collaboration difficult and, in many cases, commercially irrational. Our research identifies the key barriers that must be overcome to set the right foundation.

4



Five recommendations to act on to improve infrastructure project outcomes.

This report sets out five evidence-based recommendations to help project professionals and leaders design inter-organizational relationships that drive project success. Each is grounded in evidence from senior leader interviews and validated through academic research with University College London (UCL). The recommendations reflect not only what leaders described, but what independent analysis of high-performing projects revealed.

Five Recommendations for Infrastructure Leaders

1

Design the Relationship Model With Purpose

Deliberate relationship design acknowledges the objectives of all parties while aligning to the purpose and key outcomes of the project. This includes identifying which relationships across the delivery ecosystem are critical and which can be managed through standard arrangements. Purposeful relationship design is most effective when done early, at the business-case stage. For relationships already in flight, the most important time is now.

2

Align the Commercial Model to Deliver the Intended Relationship

Ensure the commercial model rewards collaboration and is focused on key project outcomes, not just cost and schedule compliance.

3

Make Leadership Vision and Relational Competence Part of Delivery Assurance

Hold leaders accountable for projecting a compelling narrative, demonstrating relational competence and acting as role models for collaborative practice. Treat leadership changes as relationship risk events that require active management, not just resource planning.

4

Treat Relational Risk as a Key Delivery Risk

Relational risk should feature prominently and be a constant topic at board meetings. Relationship deterioration is revealed only after it affects delivery, when point remediation costs far exceed prevention. Relationship health belongs on the project board agenda alongside cost, schedule and risk.

5

Invest in Relational Capability Across the Delivery Ecosystem

Assess relational competence at procurement and build it into competency frameworks, team design and governance routines across all partner organizations. Relational competence represents a new dimension of knowledge that goes beyond individual behaviors to encompass the full scope of how organizations structure and sustain their working relationships.

+ How do we define Relationships? See our glossary in the Appendix

Introduction

The [Pulse of the Profession](#) 2026 report from PMI finds that 81% of project professionals say projects have become more complex in recent years.¹ That complexity has been accelerated by the progressive break-up of large, vertically integrated delivery organizations into smaller, specialized units and their subsequent acquisition by multinational companies. As a result, infrastructure and capital projects are delivered through a dense network of contractors, suppliers, designers, and public bodies whose relationships now extend across organizational, cultural, and national borders.

Despite this complexity, the relationships between these organizations are rarely managed with intention. Instead, resources are consumed in managing misalignment, resolving disputes, and recovering from breakdowns that erode the value that the projects were commissioned to deliver.

The scale of relational complexity on these projects is difficult to overstate, especially when they cross into megaproject and even gigaproject territory. The Heathrow Terminal 5 project in the United Kingdom, for example, involved 60 first-tier contractors, approximately 500 second-tier subcontractors, around 5,000 third-tier firms, and as many as 15,000 organizations at the fourth-tier. Each tier multiplies the number of inter-organizational

relationships that must be coordinated, aligned, and governed.² When collaboration is left unmanaged, the consequences compound across the entire supply chain.

This report presents findings from 60 qualitative interviews with senior leaders across major infrastructure projects in the United Kingdom, Spain, France, Germany, and Australia. It is the second phase of a research program led by PMI and MIGSO-PCUBED, building on Phase 1 case study work conducted by MIGSO-PCUBED and University College London (UCL) across four exemplar United Kingdom infrastructure projects.³ Together, this body of research reveals inter-organizational relationship management as one of the industry's most inconsistently managed performance variables, and one that senior leaders identified as a decisive factor in whether projects successfully navigate complexity and deliver value worth the effort and expense.

[+ See our research methodology →](#)

The five chapters that follow present five key recommendations for effective relationship management, the evidence behind each recommendation, tools and templates to act on them, and practical steps project professionals and leaders can take from the outset of a major infrastructure project.

The central finding of this research is not that relationships matter. Every senior leader already knows this. The finding is that collaboration in major infrastructure projects is being managed as an informal, unquantified variable; while cost, schedule, and technical risk are governed with rigor. This asymmetry is a governance failure that is costing projects billions.

Recommendation 1

Design the Relationship Model With Purpose

Key finding and impact

Relationship models are rarely designed in major infrastructure projects, they accumulate.

Recognition of relationships is not the same as their design. High-performing projects in our research did not simply value relationships; they made deliberate choices about them at the front end, before commercial structures were fixed and before dysfunctional norms became entrenched.

In contrast, when relationship models are left to default, the vacuum is filled with precedent, convenience, habit and culture clashes that frequently create drag on project progress. On a major nuclear project, one leader described how attempts at strategic relationships often reverted very quickly to transactional, because the relationships were never designed at the outset and prevailing norms filled the vacuum.

The consequences are visible across major projects in this research. During the £18.9 billion construction of the Elizabeth Rail Line in London, for example,

lower-tier suppliers identified emerging problems months before they surfaced at program level, but no structured channel existed for those signals to travel upward.

On a major United Kingdom nuclear project, two teams working in close interdependency had developed entirely incompatible working cultures without either side recognizing it. The relationship deteriorated without any mechanism to surface or address it. As a result, the project was delayed approximately three months, at £1 million per day in lost revenue. Only after the senior leader invested deliberate time in building mutual understanding did things recover: “We started to get much more cooperation and trust and we actually managed to start recovering the program.”

A structured conversation at the outset could have mapped that cultural difference and saved three months of lost project time.



“We gradually realized the commissioning and operations teams had developed fundamentally different cultures. Commissioning required a fast, adaptive approach; operations demanded something else entirely.”

Senior manager, International Rail Infrastructure

Solution

| Three Steps to Intentional Relationship Design

STEP 1

Identify the critical relationships

Before designing any relationship model, leaders and project professionals must first identify which relationships across the delivery ecosystem are critical to project outcomes. Not every relationship requires the same level of investment.

This step requires mapping the full relationship ecosystem and assessing where misalignment or breakdown would most directly affect delivery. The relationships identified as critical are the ones that require deliberate design; others can be managed through standard arrangements.

Key actions: Map the full relationship ecosystem at the business-case stage and identify which relationships are critical to delivery outcomes.

STEP 2

Choose transactional or strategic for each critical relationship

Our research found relationships can be categorized as transactional or strategic. Neither model is inherently superior. What determines success is whether the choice is deliberate and suits the context.

Transactional works where scope is defined and risk can be allocated clearly.

Strategic is required where scope will evolve, risk is shared, and delivery depends on ongoing joint decision-making across organizational boundaries. Strategic only delivers, however, where there is an opportunity to feed learning back into operation.

Key action: For each critical relationship, document whether it requires a transactional or strategic model, and why.

Transactional or strategic? Key characteristics of each. See page 9

STEP 3

Apply the seven-dimensions framework

The seven-dimensions framework (Figure 1) helps map the key touchpoints in an inter-organizational relationship and includes: partner selection, contract nature, mutual understanding, interpersonal relationships, ways of working, problem resolution, and performance management.

Used at the business-case stage and throughout the project lifecycle as relationships evolve, the framework provides a lens to view inter-organizational relationships and how they can be effectively managed.

For relationships already in flight, it functions as a diagnostic, identifying where misalignment has taken root and where to intervene first.

Key action: Run each critical relationship through the seven-dimensions framework before delivery begins.

What high performing relationships do well across the seven-dimensions framework. See page 10



FROM RECOMMENDATION 1

Transactional or Strategic? Key Characteristics

From Solutions: Step 2

Transactional or strategic relationships are suited to different organizational contexts.

Both models can be highly collaborative. The difference is in depth, scope, and structural design of that collaboration.

	Transactional	Strategic
Delivery goal	Deliver a defined scope efficiently, on time, on budget, to specification	Solve a shared problem or achieve a shared outcome that neither party can define or deliver alone
Scope	Well-defined. Scope is fixed or can be fixed before delivery begins	Evolving or uncertain. Scope will be shaped through joint working
Risk	Risk can be clearly allocated. One party accepts defined risk in exchange for a price	Risk is shared. The project cannot sensibly transfer all uncertainty or risk to one party
Interdependence	Limited. Each party can largely fulfill their obligations independently	High. Delivery requires ongoing joint decision-making and problem-solving
Time horizon	Short to medium term. Relationship ends when scope is delivered	Long term. Relationship will outlast individual contract periods
Collaboration	Professional and efficient. Collaborative where useful, but within defined scope and role boundaries	Deeply collaborative by design. Shared identity, shared accountability, shared learning

FROM RECOMMENDATION 1

What High-Performing Projects do well across Seven Relationship Dimensions

From Solutions: Step 3

The seven-dimension framework identifies what is critical to developing, establishing, and measuring effective inter-organizational relationships in major projects. It provides leaders and project teams a common language and practical lens through which to design, assess, and strengthen the relationships their projects depend on.

The framework was originally developed by Johnston and Staughton (2009) to assess strategic relationships in operations management contexts and extended to inter-organizational infrastructure projects by MIGSO-PCUBED and UCL's Bartlett School of Sustainable Construction through Phase 1 of this research program. This research applied and validated the framework across 60 senior leader interviews spanning the United Kingdom, Spain, France, Germany, and Australia.

The table below provides examples of how high performing projects designed transactional and strategic relationships.

Dimension	High-Performing Transactional	High-Performing Strategic
Partner Selection	Selected mainly on technical capability and delivery track record.	Selected on behavioral fit, collaboration, and long-term alignment.
Nature of Contract	Clearly defined contracts with fixed roles, scope, and risk allocation.	Relational contracts focused on trust, transparency, and shared incentives.
Understanding Each Other	Expectations clarified upfront with limited deeper alignment.	Strong focus on aligning objectives, expectations, and success criteria.
Interpersonal Relationships	Professional and respectful, with trust based on individuals.	Trust, openness, and adaptability embedded across leadership and teams.
Ways of Working	Process-driven collaboration within contractual boundaries.	“One team” approach with integrated delivery and shared ownership.
Dealing with Problems	Issues resolved through escalation routes and contract mechanisms.	Joint problem-solving and innovation prioritized over blame.
Performance Management	Measured through hard KPIs such as cost, schedule, and quality.	Measured through both delivery KPIs and relationship health indicators.

Figure 1: The seven relationship management dimensions critical to inter-organizational relationships



The seven-dimensions framework (**Figure 1**) identifies what is critical to developing, establishing, and measuring effective inter-organizational relationships in major projects. It provides leaders and project teams with a common language and practical lens through which to design, assess, and strengthen the relationships their projects depend on.

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Outcome

Our research found that when leaders on major infrastructure projects made an explicit, deliberate choice about their relationship model and built a shared purpose, they achieved better outcomes. Front-end investment in intentional relationship design consistently delivers returns that dwarf the cost of later remediation.

Key outcomes uncovered across our research include:

- ▶ **Faster, lower-friction decision making:** Clearly defined models and shared purpose reduce the ambiguity that drives escalation and improve the ability to collaborate. On one major rail project, a critical structural issue requiring overnight agreement was only resolved because trust had been built over months of working side by side toward a clear end goal. Without that foundation, it would have caused significant project delays.
- ▶ **Fewer disputes, shorter resolution cycles:** Projects aligned at the front-end experience fewer formal disputes and faster informal resolution. Leaders described how with better relationships, fewer disputes are escalated to board level, allowing leadership to focus on project delivery and complex problem-solving, instead of conflict resolution and relationship repair.
- ▶ **Resilience under pressure:** Projects with clearly defined and well-managed relationships are more resilient to shocks. When one infrastructure client accelerated payments to its supply chain during an industry-wide crisis, it helped increase trust and resilience across the ecosystem and the effectiveness of its response to COVID-19.

CASE STUDY 1 SUMMARY: Sellafield Ltd Programme and Project Partners

In 2012, a United Kingdom National Audit Office (NAO) review found serious, sustained underperformance across Sellafield’s major projects. A flagship project had come in £1.3 billion over budget. Conventional procurement and inter-organizational relationships had failed, not from lack of good intent, but because the wrong relationship model had been applied to a project that needed something fundamentally different.

What followed was a deliberate choice to design a strategic relationship model. Key mechanisms included a greater focus on suppliers’ relational capabilities during procurement, and partnership scope was allowed to evolve through joint working and collaboration. In the spirit of working together toward a common purpose, joint decision making was established across organizational boundaries.

“We’ve had to really consciously invest, in money as well as time and blood, sweat and tears, in how we’re going to work as a team.”

Head of Strategy, Sellafield Ltd

The NAO review conducted 12 years later, in 2024, acknowledged a substantial turnaround in major project performance at Sellafield. Additionally, cultural maturity scores were consistently high across five annual cycles.

See page 34 for the full case study.

Recommendation 2

Align the Commercial Model to Deliver the Intended Relationship

Key finding and impact

Contracts often undermine good intent and collaboration

Many of the relationship problems described by interviewees are, at root, contract problems. Lowest-price procurement selection, excessive risk transfer and penalty-heavy structures push parties into defensive positions from Day One. This can incentivize withholding information, escalating disputes rather than resolving them and gaming metrics rather than pursuing objectives.

One senior leader that worked across Tube Lines, Crossrail and HS2 described how weighting too heavily toward lowest price fundamentally conflicts with quality-based selection. A common result was a fundamental gap between bid and delivery, where contractors were under commercial pressure from Day One and teams focused on litigation rather than collective ownership of project success.

On a £25 million rail franchise contract, £250,000 annual penalty clauses normalized blame-allocation over problem-solving despite the collaborative intent of all parties.

The relationship was only recovered with a change in leadership and by redirecting penalty funds into service improvement and co-designing a recovery plan, at which point the contract was extended from 10 to 20 years.

Finally, when excessive risk is transferred to a party without the capability or financial resilience to manage it, adversarial responses result as parties price, claim back or defend against the risk. A senior leader on a major airport renovation observed *“Huge risk [was] pushed back to the client who had no ability to manage it, destroying the alliance from the start.”* The consequence was a lack of collaborative decision-making and wasted resources spent on contract administration instead of project delivery.

The critical insight from this research is that these are commercial design failures that make meaningful collaboration structurally impossible.

“You need a commercial model that underpins the collaboration to incentivize the behaviors you need. The previous traditional model incentivized completely the wrong things — it created a perverse set of behaviors.”

Programme alliance director, United Kingdom Highways

Solution

| Align the Commercial Model to the Relationship You Need

STEP 1

Understand what actions are needed to develop the desired relationship

Before designing the contract for a critical relationship, the actions required to enable it need to be identified using the seven-dimensions framework (see Recommendation 1). The commercial structure must then be designed to actively enable and reward those actions.

Where scope is well-defined, the structure should be efficient and fair without over-engineering collaboration. Where scope is uncertain, long-term or highly interdependent, understand what specific actions the project needs and whether the current commercial design rewards or penalizes them.

These actions need to be embedded in the operating model of the project organization. For example, if joint working and problem-solving is required, what will be the budget for co-working?

Key action: Map the requirements across all seven dimensions of each key relationship at the business-case stage, before commercial structures are fixed.

STEP 2

Design the contract to match the relationship

Every relationship needs coherence between its stated relationship model and its commercial structure. The key is to assess the complexity of the delivery context (e.g., using the Cynefin framework⁴) and then design the contract to deal with that level of complexity. For highly complex projects, a bespoke contract is likely to be required.

For **transactional relationships**: Ensure that risk allocation is realistic, pricing covers scope, and compensation mechanisms are clear. The most persistent failure is contractors entering commercially under pressure from Day One.

For **strategic relationships**: Target-cost arrangements, open-book accounting and alliance structures will create the aligned incentives that these types of projects need. For complex projects, these contracts must be highly bespoke as every relationship differs, so no standard template will fit.

Key action: Align the commercial structure with the actions identified in Step 1. Design the contract to match the relationship, not the other way around.

Choosing the right commercial mechanism. See page 15

STEP 3

Respect the contract and be open to changing it when necessary

The commercial discipline required of collaborative arrangements is not to override the contract, but to respect it and be open to changing it if it's not producing the intended outcomes.

On the @one Alliance, a £1.2 billion water infrastructure investment in the United Kingdom, the client recognized approximately 18 months into the work that partners were trying to maximize their individual share of the investment rather than focusing on a collective purpose. The incentive structure was redesigned. The willingness to act, rather than persisting with a model producing the wrong outcomes, was cited as a defining feature of the alliance's success.

Key action: Build regular commercial review points into the governance rhythm and be willing to reset the commercial model if it's not delivering the intended relationship and project outcomes.



FROM RECOMMENDATION 2

Choosing the Right Commercial Mechanism

From Solutions: Step 2

The relationship model should determine the contract form, never the other way around. The figure below maps commercial mechanisms to relationship complexity. Three steps guide the choice.

| Three Steps To The Right Choice

1. Analyze the desired relationship

Is it strategic or transactional? A detailed contract does not guarantee success. Use a complexity framework (e.g., The Delivery Environment and Complexity Analytic; DECA) to understand what the commercial model must accommodate.

2. Analyze your relational capability

A collaborative contract in immature hands produces confusion instead of collaboration. Assess capability across all seven dimensions (See recommendation 1 for full framework).

3. Choose the right contracting model

Traditional (Transactional) Contracts

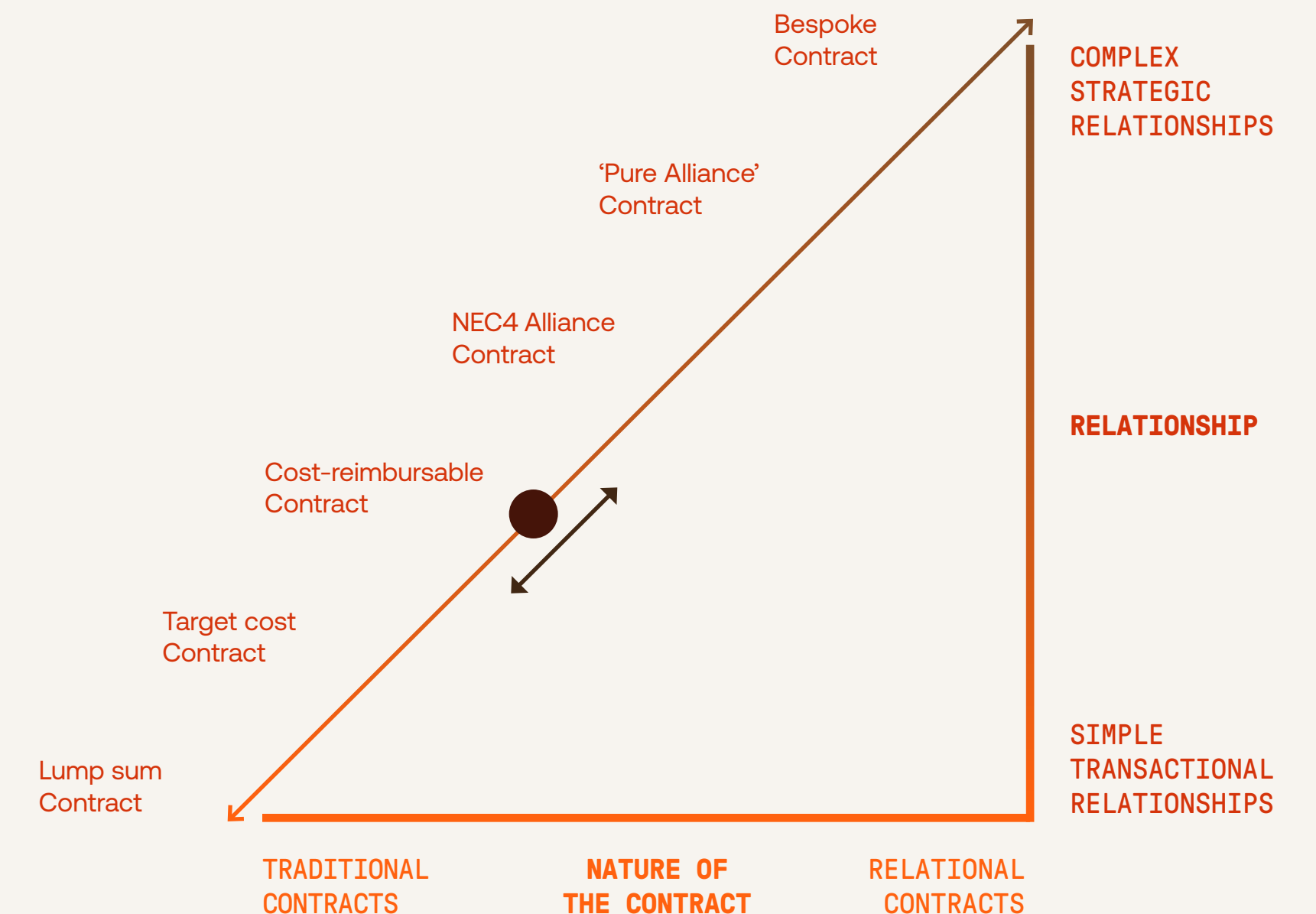
Rooted in Transaction Cost Economics, traditional contracts treat scope as fixed, parties as interchangeable, and risk as something to be clearly

allocated and/or transferred. Compliance is typically enforced through penalties, claims, and liquidated damages. They are well-suited to projects where requirements are well-defined and delivery can largely be managed independently.

Relational Contracts

Relational contracts accept scope can evolve. They typically include shared incentives, pain/gain mechanisms, and open-book accounting – sometimes with penalty-clauses removed entirely. Suited for long-term relationships that require high mutual trust, where risk cannot be sensibly transferred to one party and delivery depends on joint working across organizational boundaries

Figure 2: Design the contract to match the relationship you need



Outcome

Senior leaders reported that when they aligned commercial models to their relational intent, these relationships consistently outperformed those that did not align.

A transactional contract can also be collaborative; the key is to be realistic, flexible and prepared to change the contract if circumstances require it.

Key outcomes of matching contracts to relationships include:

- ▶ **Improved collaborative decision-making:** Partners operating under commercially aligned contracts bring problems forward rather than concealing them in anticipation of claim. On a complex urban tunneling project, a hidden power cable that cost over £1 million to resolve was addressed without

project delay because a collaborative commercial model enabled rapid problem-solving rather than becoming entrenched in contractual disputes.

- ▶ **Partners enter projects in a position to deliver:** Realistic risk allocation and fair pricing mean contractors are not commercially under pressure from Day One which drives defensive and risk-averse behaviors.
- ▶ **Commercial structures that reinforce relationships and encourage innovation:** When incentives are aligned, the natural self-interest of each party works in the same direction as project delivery. Partners operating in commercially aligned, high-trust environments bring ideas and solutions they would withhold in adversarial structures.

CASE STUDY 2 SUMMARY: Anglian Water's @one Alliance

For years, Anglian Water in the United Kingdom was experiencing underperformance from its existing supply chain on its capital projects. A key problem identified was the administration of individual contracts whose structure and risk allocation drove adversarial behaviors from partners, encouraging defensiveness instead of collaboration.

The answer was a deliberate decision to restructure not just the contracts, but the commercial logic underneath them. Partners were selected on 80% quality and 20% price with behavioral assessments built in from the start. Risk was shared fairly and all partners would rise or fall by collective performance. Critically, commercial sustainability was treated as a design requirement: if partners couldn't earn a fair return, they would default to protecting themselves rather than solving problems together. As one director put it: *"It's better to gang up on the problem than each other."*

Ten years on, @one Alliance is rated a frontier performer by Ofwat, consistently outperforming sector benchmarks. When COVID-19 hit, the structure was stress-tested and held. Collaboration now rewards partners and is financially rational by design.

See page 36 for the full case study.

Recommendation 3

Make Leadership Vision and Narrative Part of Delivery Assurance

Key finding and impact

The highest performing projects are led by people who can define a compelling vision, translate it into narrative, and ensure both survive over time.

PMI's 2025 Maximizing Project Success Thought Leadership Research establishes clarity of vision as the strongest measurable driver of project outcomes. Projects with a clearly defined vision scored +41 on the Net Project Success Score, compared to -18 for those without. High-performing projects in this research had leaders that co-created a shared vision that resonated across partnering organizations, strengthening their relationships.⁵

Defining the vision is the starting point, what distinguishes the highest performing leaders in our research is how they put it into motion. The leaders who produced the strongest outcomes in this research turned vision into practice through three actions:

1. **They projected a compelling narrative** that gave everyone across the delivery ecosystem a reason to collaborate. Narrative gives vision context, creates engagement and alignment across organizations, and shows how work connects to what the project is trying to achieve. A shared frame of reference that allow partners to navigate disagreement without the relationship deteriorating.

2. **They demonstrated that narrative consistently, especially under pressure.** Leaders who oscillated between collaborative and adversarial approaches destroyed trust fast, because the inconsistency removed the predictability the partner organizations needed. As one CEO put it: The real test is not the easy periods — it is the hardest ones.
3. **They built structures to ensure the narrative survived when they moved on.** It is vital vision and narrative are not lost when leaders depart. On ITER, the world's largest nuclear fusion project, a director spent seven years rebuilding trust between 35 nations through sustained narrative and consistent behavior. When he died unexpectedly in 2022, the relational capital could not be transferred. Among many reasons, this caused the first key milestone to slip by nine years and costs rose by €5 billion.

These three actions are key delivery disciplines that belongs in project assurance alongside cost, schedule, and risk.

The organization lost all of its intellectual knowledge before it delivered the project. Every one of the executives who built [the initial stations]... none of them were there at the end, not through their own choice. There was no succession planning.... So there was no sense of decision-making and living with the consequences of it, or feeling responsible for delivering on what you started."

Former CEO and chair, Major United Kingdom Infrastructure Project

Solution

| Three Dimensions of Leadership as a Governed Delivery Variable

STEP 1

Project a compelling mission narrative

The most effective leaders in this research did not just manage. They told a story that gave thousands of people across dozens of organizations a reason to pull in the same direction.

Co-create a shared mission at the front end that resonates across all partner organizations. Then select leaders who can articulate and sustain that story under pressure.

The narrative is not a communications exercise. It is the shared frame of reference that allows organizations to navigate disagreement without the relationship deteriorating.

Key action: Co-create the project narrative at the business-case stage and define the narrative capability required for each senior leadership role.

STEP 2

Demonstrate relational competence consistently

A compelling narrative is ineffective if the leader's actions contradict it. Turbulent times during project delivery are a critical test of a leader's actions.

Therefore, projects need to build leadership relational competence into delivery assurance: define the observable standards of relational competence the project requires, build peer review mechanisms, and make findings visible to boards alongside cost and schedule data.

This increased accountability and visibility additionally encourages leadership actions that align with the needs of the project and the narrative.

Key action: Add leadership relational competence as a standing item in project assurance reviews, with findings reported to the board.

Leadership relational competence by relationship model. [See page 19](#)

STEP 3

Protect the narrative through leadership transitions

When the leader who holds the narrative departs, the story departs with them or is quietly rewritten by whoever follows. To avoid that, you can govern that transition by:

Structure joint handovers where outgoing and incoming leaders meet their counterparts. Build an explicit re-establishment period acknowledged in project risk reporting.

Guard against mission drift at the point of transition: Incoming leaders often reshape or expand scope, gradually displacing the original mission. Require any change of scope or direction at a handover to be tested against the agreed mission and formally signed off, not absorbed by default.

Embed the narrative in governance artifacts that outlast any individual and build collective memory.

Key action: Govern every senior leadership transition as a formal relationship risk event. Ensure the narrative survives the individual.



FROM RECOMMENDATION 3

Leadership Relational Competence by Relationship Model

From Solutions: Step 2

Leadership Dimension	Transactional Relationship	Strategic Relationship
Narrative and purpose	▶ Clarity of scope, expectations, and deliverables. ▶ The story: what we are delivering and how we will work together efficiently.	▶ A compelling shared mission that resonates beyond organizational boundaries. ▶ The story: why this matters and what we are collectively trying to achieve.
Competence under pressure	▶ Predictable commercial conduct. ▶ Honouring commitments. ▶ Pragmatic contract administration.	▶ Sustained openness. ▶ Willingness to surface problems before they become claims. ▶ Collaborative problem solving even when the commercial position is difficult.
Consistency	▶ Efficient, fair, and reliable. ▶ Partners know what to expect in good times and bad.	▶ Collaborative intent maintained under schedule and cost pressure. ▶ No reversion to adversarial behavior when things get hard.
Trust-building	▶ Deliver what you promise. ▶ Clear communication. ▶ Timely decisions.	▶ Visible personal investment in the relationship. ▶ Meet-the-leader sessions. ▶ Co-location. ▶ Willingness to be vulnerable about uncertainty.
Narrative continuity	▶ Clear documentation. ▶ Structured handover. ▶ Incoming leader honours existing commitments.	▶ Joint handover with counterpart organization. ▶ Explicit re-establishment period. ▶ The story carries across leadership transitions.

Outcome

When leadership narrative, behavior and continuity are treated as a single governed discipline, the returns are visible across every dimension of project performance:

- ▶ **A shared story that holds the ecosystem together:** Leaders who projected a compelling mission narrative created a shared identity that held organizations together through high-pressure periods. Sellafield contributed part of the success of its £7 billion project delivery framework to the co-created mission statement produced between four organizations with entirely different commercial interests.
- ▶ **Actions that make the narrative credible:** When senior leaders take actions that are consistent with the project narrative, especially under pressure, it reinforces the project's mission across the delivery ecosystem.

Meet-the-leader sessions, visible presence at critical moments and deliberate reinforcement of shared purpose were cited as the mechanisms that made the tone from the top tangible. This research found a strong link between consistent, trusted leadership and shorter escalation cycles and fewer contractual confrontations.

- ▶ **A narrative that survives leadership change:** Projects that governed transitions as relationship risk events recovered relational performance significantly faster than those that treated transitions as routine personnel matters. The project narrative, the partnering charter and the shared mission are key artifacts that allow collaboration to survive the departure of any single individual and should be taken into account if project scope is changed.

CASE STUDY 3 SUMMARY: ITER: The World's Largest Fusion Project

ITER is a prototype fusion reactor being built in the south of France. The construction cost is estimated at €20 billion, fueled by investment from 35 nations. But in 2013 it was in serious trouble. Costs had more than doubled, several member nations were openly questioning whether to walk away, and a management review had concluded the project would fail without urgent change.

Bernard Bigot was appointed director-general in 2015 and spent the next seven years rebuilding trust between member parties through sustained personal diplomacy and a consistent alignment between what he said and what he did. Construction advanced, assembly began and the ITER Council unanimously reappointed him for a second term.

In May 2022, Bigot died unexpectedly. The handover process could not adequately transfer the relationships he spent seven years building. The project's first major proof-of-concept milestone (first plasma) slipped from 2025 to 2034, full operations to 2039 and costs rose by an additional €5 billion. The project had never treated its relational capital as something that needed to be governed. When it was gone, negative delivery consequences followed.

See page 38 for the full case study.

Recommendation 4

Treat Relational Risk as a Key Delivery Risk

Key finding and impact

There is no widely adopted industry standard for measuring relationship health in major infrastructure projects.

Most project boards receive detailed reporting on cost, schedule, technical risk and commercial exposure. Almost none of the projects in our research received systematic reporting on the health of the inter-organizational relationships or collaboration. However, those that made some attempt at measurement reported greater ability to detect relationship issues and intervene early.

The consequence is that relationship deterioration is typically diagnosed only after it has affected delivery: when a dispute has been filed, when a key partner has begun to disengage or when information-sharing has broken down to the point where cost and schedule data can no longer be trusted. Several interviewees described major projects where the eventual delivery crisis had visible relational precursors that went unmonitored for months.

We have not yet found a successful project that had a failed critical relationship. The evidence from this research suggests that relationship failure and project failure are not merely correlated; they are causally linked.



“We devised an assessment that we ran regularly to try to measure the performance of the relationship as a whole between the organizations.... And there was actually a moment a couple of years into the project where we could see a real downturn in the results. So, we made a concerted effort, a decision that we were going to have a kind of reset and it really paid off — because we hit some challenges on the project not long after that. And I think had we not been through that reset, it would have been even more difficult.”

Managing director, Major Rail Infrastructure Project, United Kingdom

Solution

| Three Steps to Building Relationship Health into Project Governance

STEP 1

Agree on what matters and define a baseline

All relationships are different.

Partners should jointly agree which characteristics matter most to their relationship using the seven-dimension framework, define a target state, and assess the current state together to create a shared baseline. These measures then support ongoing monitoring, with intervention triggered if performance deteriorates.

Research participants from the best practice projects consistently identified early warning signs of deterioration: increasingly formal communications, reduced collaboration, growing reliance on contractual rights, declining engagement in governance meetings, and a shift toward defensive responses. Recognizing these signs allows organizations to intervene before relationship deterioration impacts project success.

Key action: Jointly define the key relationship characteristics alongside a shared based line, target state and key actions.

Agreeing on what matters: baseline, action plan and intervention. [See page 23](#)

STEP 2

Establish a structured, repeatable measurement process

Organizations need a structured measurement process owned by all parties. Regular assessments, ideally quarterly for strategic relationships, should gather perspectives from the people who are influential in the relationship, not only senior leaders. The measurement should track performance on the characteristics that have been agreed to be important for each specific relationship, as defined in Step 1.

Key action: Establish a jointly owned, repeatable measurement process that captures perspectives from key influencers in the relationship.

STEP 3

Embed relational health into board reporting

Add relational performance data to board reporting alongside cost, schedule and risk. Relational risk should feature prominently and be a constant topic at board meetings, treated with the same seriousness as any other key delivery risk.

One United Kingdom energy project combined client satisfaction surveys, a joint culture survey, external monitors at governance sessions and joint KPIs covering safety, change request efficiency and resource retention. As its leader explained: “There’s power in just saying that we’re investing in this.”

In Australia, Seqwater reports trust as a formal KPI to the Queensland Government on a six-month cycle.

Key action: Add relationship health to board reporting with escalation thresholds and assigned ownership.



FROM RECOMMENDATION 4

Agreeing What Matters: Baseline, Action Plan, and Intervention

From Solutions: Step 1

Every relationship is different. Start by jointly agreeing what matters.

Step	What To Do	Why It Matters
1. Agree characteristics	Using the seven dimensions (see recommendation 1), jointly identify which characteristics matter most to this specific relationship.	Not every dimension matters equally; e.g., a client-specialist relationship may weight ‘understanding each other’ most heavily.
2. Define target states	For each characteristic, describe what good looks like in concrete, observable terms.	The target state gives both parties a shared picture of where the relationship needs to be.
3. Score the baseline	Score the current state of each characteristic. The score must be widely agreed by participants from both organizations.	This jointly owned score is the baseline: the quantified starting point against which all future progress is measured.
4. Build the action plan	Co-develop specific actions to move from the current state to the target state for each characteristic.	The action plan bridges the gap between baseline and target; without it, measurement is diagnosis without treatment.
5. Monitor and intervene	In future reassessments, if any score falls below the baseline, this is the trigger for immediate intervention.	A declining score signals the relationship is moving in the wrong direction; the baseline turns measurement into a governed early-warning system.

Six early warning signs of relationship deterioration:

- ▶ Communications becoming more formal (longer emails, wider cc lists)
- ▶ Partners withdrawing from joint forums
- ▶ Problems being solved unilaterally
- ▶ Contractual rights cited in routine interactions
- ▶ Cost or schedule data shared selectively
- ▶ Defensive responses replacing open problem solving

Outcome

Projects that introduce systematic relationship health monitoring report consistent improvements across the dimensions that are most directly linked to delivery performance:

- ▶ **Early detection before delivery impact:** Relationship deterioration is identified through measurement, not through delivery failure. On a major United Kingdom fusion energy project, structured assessment revealed that the two partner organizations were experiencing the same relationship in fundamentally different ways, yet had no mechanism to surface this divergence. Making it visible gave both organizations the ability to intervene before misalignment became a project crisis.
- ▶ **Fewer formal disputes and claims:** Projects with visible relationship health monitoring report

lower rates of formal dispute escalation. One United Kingdom project used a constructive collaborator tool to measure the relationship, identify outliers and generate joint improvement plans: The data showed measurable strengthening over successive assessment cycles, and problems that surfaced through measurement were resolved collaboratively rather than through contractual mechanisms.

- ▶ **Boards that can govern the full picture:** Adding relationship health to board reporting means project sponsors and executives are governing the full determinants of delivery performance. In Australia, Seqwater's trust scores across its project portfolio have remained high through COVID-19, the Brisbane floods and Tropical Cyclone Alfred, precisely because trust was measured and governed as a formal KPI rather than assumed.

CASE STUDY 4 SUMMARY: Making the invisible visible: Measuring relationship health on a first-of-its-kind energy program

A first-of-its-kind United Kingdom energy program was being delivered through a highly specialized relationship. One organization held irreplaceable technical expertise, the other held the mandate and the funding. There were no alternatives, which increased dependency between the two organizations. Despite this, the project had no systematic way of assessing how the relationship was actually performing, no shared language for discussing concerns and no mechanism to surface the divergence before it became a problem.

MIGSO-PCUBED deployed its RelationalRISK™ Improver across both organizations — structured interviews from board level to working practitioners, followed by a process that brought each organization's independent concerns into a single, jointly owned metric across more than 10 relationship characteristics. The diagnostic revealed both organizations were experiencing the same relationship in fundamentally different ways, yet had no way of knowing it.

Relationship health now sits on the program board alongside cost, schedule and risk. It is used as a leading indicator that enables intervention before relational issues become program crises. As the CEO put it: *"If you focus on the positive achievement of an objective, you will minimize the risks. If you just focus on avoiding the risks, you won't avoid them, they'll actually happen."*

See page 40 for the full case study.

Recommendation 5

Invest in Relational Capability Across the Delivery Ecosystem

Key finding and impact

The gap between collaborative intent and collaborative practice is a capability gap, not a motivation gap.

Most senior leaders in infrastructure delivery are committed to collaboration. Most have participated in workshops, signed charter documents and described partnership values. What high-performing projects in our research do differently is they build relational delivery into the operating model of the project organization. This is through deliberate investment across all seven dimensions of the relationship framework, from partners selection and contract design through to ways of working, problem-solving, and performance management. In the best projects, they covered most of the seven dimensions at a reasonable level of depth. This investment is sustained, deliberate, and measurable.

The cost of not making this investment is visible in our research:

- ▶ One senior leader interviewed described relationships as “the silent scope” of projects and an element rarely invested in but foundational to everything else.
- ▶ An alliance to deliver major infrastructure improvements in Europe collapsed and had to return to conventional contracting because teams were given autonomy without the relational capability and collaboration skills to use it.
- ▶ On the building of a 25km super sewer in the United Kingdom (Tideway), one of the most deliberately relational projects in this research, a senior leader reflected that the industry still prioritizes technical skills at the point of appointment, with the relational dimension treated as secondary.

“We have a behavioral coach who participates in our [Early Contractor Involvement] ECI workshops to assess how we’re working together. We’ve had people changed out because we didn’t think they were a good fit for the relationship we want to have.”

Portfolio Director, Major Water Infrastructure, Australia

“We have been able over the years to develop really strong relationships with key people... our clients can see they trust us... that increases the likelihood of project success. That’s something we really are careful to cultivate.”

Director, Engineering Consultancy, Queensland, Australia

Solution

| Three Steps to Build Relational Capability

STEP 1

Assess relational capability at procurement

The most effective point at which to invest in relational capability is before the relationship begins. For example, United Kingdom Government Early Contractor Involvement (ECI) processes can be used to assess relational competence across all seven dimensions before contract award.⁶

Commission an independent coach to observe how potential partners engage with uncertainty, handle disagreement, share information and respond to challenges. Feed this assessment into the selection decision alongside technical and commercial evaluation.

Where a partner's technical capability is strong but their relational competence is not, have the direct conversation: what would need to change, and who on their team would need to change, for this relationship to work?

Key action: Integrate relational competence assessment into procurement and embed it in partner selection criteria across all seven dimensions of the framework, not only interpersonal behaviors.

STEP 2

Build relational capability through the project lifecycle

Relational capability is not just established once at project launch and maintained automatically. It is built continuously and most severely tested at the moments of maximum delivery stress: when scope changes, costs escalate, timelines shift, or leadership rotates.

The highest performing projects invested systematically in people: Sellafield's nuclear delivery program established a Project Academy with 51 courses and opened it to the supply chain; a major United Kingdom rail infrastructure project, EWR2, used one-to-one interviews at induction and removed people who did not fit the relational requirements of the role.

Build peer feedback into the projects leadership rhythm and commission facilitated realignment workshops at moments of stress, before relationships deteriorate.

Key action: Invest in relational capability at critical moments across the lifecycle, not just at the beginning.

Relational Competence investment across the project lifecycle. [See page 27](#)

STEP 3

Make relational competence visible, measured and accountable

Define what good looks like across all seven dimensions for the relationship model chosen, measure actual performance against that standard, and hold people accountable for the gap.

Incorporate relationship health metrics into individual performance assessments for senior leaders, not as a cultural supplement to technical performance, but as a delivery metric in its own right.

Use the measurement framework described in Recommendation 4 to generate the data that accountability requires. Be willing to act on that data with the same directness that would be applied to a cost overrun.

Key action: Incorporate relational performance into individual accountability and delivery assurance.



FROM RECOMMENDATION 5

Relational Competence Investment
Across the Project Lifecycle

From Solutions: Step 1

Stage	Investment	Purpose
Procurement & ECI	Relational competence assessment across all seven dimensions. ECI workshops observed by independent coach.	Identify genuine collaborative capability before commitment.
Mobilization	Joint leadership development. Shared purpose workshops. Partnering charter.	Build shared identity before delivery pressure begins.
Steady state	Facilitated reviews at milestones. Peer feedback on relational competence. Joint problem-solving routines.	Maintain relational performance; address gaps early.
Under stress	Facilitated realignment. External support. Leadership coaching at transitions.	Protect performance when most severely tested.
Close	Relational debrief. Capture lessons learned. Transfer capabilities.	Retain knowledge for future projects.

Outcome

Projects that invest deliberately in relational capability, through selection, development and accountability, report sustained improvements in collaborative performance that translate directly into measurable project outcomes.

- ▶ **Collaboration that holds under pressure:** Partners with genuine relational capability maintain collaborative behaviors when commercial and schedule pressure is highest. On Tideway, the £4.5 billion project increased the effectiveness of its problem-solving and ability to adapt during the pandemic because of its relational approach. Problems were solved jointly rather than escalated to claims, ultimately helping the project deliver within budget and on schedule, with all contractors remaining profitable.
- ▶ **Relational capability that compounds over time:** Projects that invest in relational capability build organizational memory of what works.

Anglian Water’s @one Alliance has delivered over 800 infrastructure projects in the United Kingdom between 2015 and 2024 and consistently outperforms business plan targets because the relational capability built across a 15-year partnership carries forward from one project to the next.

- ▶ **A measurable return on capability investment:** Relational capability investment is not a cost without return. Alongside the other practices described in this report, Sellafield’s PPP has realized £450 million in value-for-money benefits and saved over £80 million in avoided procurement costs, with the project on track to exceed its £700 million value-for-money commitment to government. These returns were generated through a combination of deliberate relationship design, sustained capability investment and the collaborative behaviors that followed.

CASE STUDY 5 SUMMARY: Building the capability to collaborate: relational investment in Australia’s water infrastructure

Seqwater oversees more than AU\$7 billion in capital projects. From the outset, its leadership made a deliberate choice: Seqwater’s own people would always lead its projects, behavioral capability would be assessed during procurement and enforced during delivery, and trust would be measured as a formal organizational KPI, not treated as a cultural by-product.

That commitment was tested in practice. On one of its largest current projects, a commercial lead who refused to share risk during ECI workshops was escalated and removed. On an AU\$1.2 billion flagship project, a partner who had initially refused to engage was transformed into a willing collaborator within four months through deliberate relationship-building and personal escalation.

Community trust scores have remained high through COVID-19, the Brisbane floods and Tropical Cyclone Alfred — rising to a record 70% in the aftermath of the cyclone. As general manager Melanie Gordon described it: *“You spend a lot of time going and having a coffee with someone... sometimes for no reason at all, it’s just about the relationship.”*

See page 42 for the full case study.

Conclusion

Major infrastructure projects are vital for delivering value to society. They connect communities. They power homes and industries with new sources of energy. They build the hospitals, schools, and transport networks that define the quality of life of future generations. That is the value at stake when these projects succeed and the value that is lost when they do not.

The five recommendations in this report help ensure that this value is protected and delivered. When relationships are poorly designed, commercially misaligned, and led without narrative or consistency, the consequences are felt in delayed infrastructure and stalled energy transitions that costs twice what they should and arrive a decade late. The biggest impact of this failure to manage relational risk is society, whose citizens have to cope with poor infrastructure and inefficient services.

The evidence from this research is consistent and clear. Relationship management can no longer be a cultural add-on at the margins of delivery. It needs to be recognized as a structural, governance, and leadership variable that determines whether projects achieve what they are commissioned to do.

Infrastructure projects exist to elevate our world. Whether they do depends, ultimately, on the quality of the relationships through which they are delivered and on whether leaders and project professionals choose to design and foster those relationships with the rigor the value at stake demands.



Acknowledgements

This research would not have been possible without the generosity of the 60 senior leaders who gave their time, insight, and candor during interviews conducted across the United Kingdom, Spain, France, Germany, and Australia. Their willingness to share both successes and failures is the evidential foundation of this report.

PMI and MIGSO-PCUBED would like to thank the following organizations whose leaders participated in this research:

- ▶ **Government and independent bodies:** National Infrastructure Commission, National Audit Office, Environment Agency, Home Office, Merseyside Police
- ▶ **Infrastructure owner-operators:** HS2 Ltd, Crossrail Ltd, TfL, NHS England, Sellafield Ltd, UKIFS, United Kingdom National Nuclear Laboratory (UKNNL), Anglian Water, Sizewell C, Tideway London, Gatwick Airport, Network Rail, National Highways, Seqwater, Origin Energy, Airservices Australia, North Queensland Bulk Ports Corporation, EDF
- ▶ **Main contractors and engineering firms:** AECOM, Sir Robert McAlpine, SYSTRA, Arcadis, ENCOTEC, Grupo Avintia, Vyncke, Agilia, Chilworth
- ▶ **Consultancies and advisory firms:** Amentum, BCG, Effectus, Storm Environmental, TSA Riley
- ▶ **Professional bodies and associations:** Association for Project Management (APM), Major Projects Association (MPA), Institute of Directors (IoD), Crossrail International, Queensland Major Contractors Association (QMCA), UIC — International Union of Railways
- ▶ **HR / skills development:** Cogent Skills, National Skills Academy for Nuclear (NSAN), National Skills Academy for Rail (NSAR), Nuclear Skills Taskforce, Oakridge Centre
- ▶ **Finance / advisory:** Société Générale

We also acknowledge our academic partner, University College London (UCL), whose collaboration on Phase 1 of this research program provided the theoretical and methodological foundation on which Phase 2 was built.

Glossary

- ▶ **Behaviors:** The interpersonal dimension of relationship management: how individuals interact, communicate, build trust and respond under pressure. Behaviors are one component of relational competence and not a synonym for it.
- ▶ **Collaboration:** Structured, deliberate joint working toward shared or aligned objectives, enabled by the relationship model and reinforced by the commercial model. Both transactional and strategic relationships can be collaborative; the nature and depth differ by model.
- ▶ **Relational capability (of an organization):** The ability of an organization to design, establish and sustain effective interorganizational relationships. It is built through deliberate investment in people, processes, governance and commercial arrangements across all seven dimensions, rather than relying on talented individuals alone.
- ▶ **Relational competence (of a person):** The knowledge, skills and judgment an individual brings to managing interorganizational relationships across all seven dimensions.
- ▶ **Relational risk:** The risk that interorganizational relationships will deteriorate to the point where they impair delivery. It is a delivery risk, not a cultural concern, and should be governed alongside cost, schedule and technical risk.
- ▶ **Strategic relationship:** A relationship suited to contexts where scope will evolve through working jointly. Risk is shared and delivery depends on ongoing joint decision-making across organizational boundaries. Strategic relationships only delivers where there is an opportunity to feed learning back into operation. Neither the strategic or transactional relationship model is inherently superior; what matters is that the choice is deliberate.
- ▶ **Transactional relationship:** A relationship suited to a well-defined scope where risk can be clearly allocated, and each party can largely fulfil its obligations independently. Transactional relationships can still be highly collaborative; the collaboration operates within more defined boundaries.

Methodology

This research employed a qualitative, semi-structured interview design. Sixty interviews of 60 to 90 minutes were conducted with senior leaders actively involved in or influencing collaboration in major infrastructure projects across the United Kingdom, France, Spain, Germany, and Australia. Participants were drawn from government agencies, infrastructure owner-operators, main contractors, engineering firms, consultancies, and professional bodies. Data was analyzed using the seven-dimension relationship framework (Johnston and Staughton, 2009; Sandoval et al. 2025), with coding conducted in NVivo. The findings were triangulated against Phase 1 case study data (four United Kingdom exemplar projects) and validated through academic peer review with UCL.

The data is split across the following groups and sectors:

	Count	Examples
Infrastructure Owner-Operators	25	HS2, Sellafield, EDF, Airservices Australia
Main Contractors and Engineering firms	11	Sir Robert McAlpine, AECOM, Grupo Avintia
Consultancies and Advisory Firms	7	BCG, Amentum, Arcadis, SYSTRA
Professional Bodies and Associations	6	Association for Project Management (APM), Major Projects Association (MPA), Queensland Major Contractors Association (QMCA)
HR / Skills Development	5	Cogent Skills, National Skills Academy for Nuclear (NSAN), National Skills Academy for Rail (NSAR)
Government and Independent Bodies	5	National Infrastructure Commission, National Audit Office
Finance / Advisory	1	Société Générale
Total	60	

Sector	Count
Cross-sector / General	16
Rail	13
Nuclear / Fusion	12
Water	4
Aviation	3
Roads	2
Environment	2
IT / Digital	2
Energy	2
Health	1
Ports / Maritime	1
Energy / Finance	1
Real Estate	1
Total	60

Appendix

CASE STUDY 1

Designing the relationship model with purpose: Sellafield Ltd Programme and Project Partners

Context

In 2012, a National Audit Office review identified serious and sustained underperformance across Sellafield Ltd's major projects (NAO, 2012). Conventional procurement had failed because the wrong relationship models had been applied. The Programme and Project Partners (PPP) model, mobilized in 2018 with four partners — KBR, Jacobs, Morgan Sindall Infrastructure, and Babcock International — was built from the ground up as a strategic relationship.

What they did

Sellafield made an explicit, front-end decision to pursue a strategic rather than transactional relationship model. Risk could not sensibly be transferred to one party, scope would evolve through joint working, and delivery required ongoing joint decision-making across organizational boundaries.

Partners were procured separately, selecting each for what it could genuinely contribute rather than asking a pre-formed group to compete. Behavioral capability accounted for 30% of the overall procurement score, assessed across 25 desired characteristics, with ISO 44001 used to design the assessment questionnaires and structured workshops run to observe how candidates would actually behave. Commercial incentives were aligned to collective outcomes: partners receive the majority of their profit only on successful asset handover, on time, on budget, to scope, through

a joint Aligned Incentive Agreement, making collaboration the financially rational choice for all parties. The contract has no liquidated damages and no penalty clauses (Sellafield Ltd, 2022). Sellafield also embedded its own people into partner organizations as the "fifth partner," and all five parties co-created a shared mission statement during mobilization.

What changed

The 2024 National Audit Office (NAO) report acknowledged a substantial turnaround in major project performance at Sellafield. PPP has two projects that moved from 'yellow' to 'green' in the Infrastructure Projects Authority (IPA) Annual Report of Major Projects (IPA, 2023). Cultural maturity scores across all ten assessment pillars have never declined across five annual measurement cycles (Sellafield Ltd, 2024). The project also invested heavily in talent development: 37 apprentices and 20 graduates in 2023 alone, alongside 51 academic courses in partnership with the University of Cumbria (Sellafield Ltd, 2024).

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Leader voices

“The three big things are the 20 years, the approach to incentivisation, and the collaboration and the behaviours. We used the band analogy, bought the best guitarist and the best drummer. What unites them and us is the behaviours and the culture. We’ve had to really consciously invest, in money as well as time and blood, sweat and tears, in how we’re going to work as a team.”

Laura Doughty

Head of Strategy, Sellafield Ltd

“The hardest part was the assessment of the collaborative behaviors that they would show. We used ISO 44001 to design all the questionnaires and we ran workshops in the assessment process to actually understand how they would behave. And that was a key part of getting the PPP to work. But also the design of the incentive model was very important for that program.”

Alex Walsh

Head of Planning, Sellafield Ltd

“It’s the behaviors of your individuals, your people, they’re the only assets you’ve got. If you’ve not got the right behaviors, you’ve not set up the right environment, you’ve not got the right culture, and you’ve not got relationships at a strategic level to get quick decision-making in place, then you should walk away.”

Andy Sharples

Projects Director, Sellafield Ltd



🔍 CASE STUDY 2

Aligning commercial structure to collaborative intent: Anglian Water's @one Alliance

Context

By the early 2000s, Anglian Water's conventional approach of managing a portfolio of individual contracts was producing inconsistent performance and adversarial behavior from its supply chain. The @one Alliance, first established in 2005 and substantially reset in 2015, was underpinned by a decision to change the commercial approach to contracting and collaboration. Influenced by what had worked on National Grid and Heathrow Terminal 5, the second-generation model has delivered over 800 projects and consistently outperformed business plan targets.

What they did

The alliance was built around three principles that directly aligned commercial incentives with collaborative behavior.

First, partners were selected individually on a weighted basis of approximately 80% quality and 20% price, with behavioral assessments embedded in procurement from the outset. As the Head of Supply Chain Performance described: *"We did behavioral assessments, we did workshops [building on what was done] right back 25 years ago with the formation of the @one Alliance."* Selection went beyond formal assessment centers to direct executive-to-executive conversations where shared values and commitment to a sustainable commercial model were explicitly tested.

Second, the commercial structure was designed around shared incentivization and open-book accounting. All partners rise or fall by collective performance. Risk is shared, not transferred. The client assumed risk and increased the behavioral focus on further levels of outperformance, removing incentives around turnover, hours charged, fee recovery and perceived partner self-interest (ICG, 2014). As one director suggested: *"We all rise up or fall by our collective performance."*

Third, commercial sustainability was treated as a design requirement, not a by-product. Anglian Water explicitly committed to ensuring partners could earn a fair return, recognizing that commercially stressed contractors default to adversarial behavior.

What changed

Twenty years on, the @one Alliance consistently outperforms both its own historical baselines and the wider water sector, rated as a frontier performer by Ofwat (the United Kingdom national regulatory body for water and sewage industry). Innovation rates exceed what comparable traditionally procured projects achieve, because partners operating in a commercially secure, high-trust environment bring ideas they would withhold in adversarial structures. When the alliance was stress-tested by the COVID-19 pandemic and regulatory uncertainty, the commercial structure held; partners maintained collaborative behaviors because the incentive structure made collaboration the commercially rational choice. back 25 years ago with the formation of the @one Alliance.” Selection went beyond formal assessment centers to direct executive-to-executive conversations where shared values and commitment to a sustainable commercial model were explicitly tested.

Second, the commercial structure was designed around shared incentivization and open-book accounting. All partners rise or fall by collective performance. Risk is shared, not transferred. The client assumed risk and increased the behavioral focus on further levels of outperformance, removing incentives around turnover, hours charged, fee recovery and perceived partner self-interest (ICG, 2014). As one director suggested: “We all rise up or fall by our collective performance.”

Third, commercial sustainability was treated as a design requirement, not a by-product. Anglian Water explicitly committed to ensuring partners could earn a fair return, recognizing that commercially stressed contractors default to adversarial behavior.

Leader voice

“The only reason why I joined Anglian eleven years ago was they were the most progressive client organization that I’d come across in my whole portfolio across civil engineering and the utility sector. Their approach was both enlightened and had the best chance of collective success.”

Jason Tucker

Director of Commercial Operations, Anglian Water

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🔍 CASE STUDY 3

When leadership is the project: how leadership consistency shaped, and shook, the world's largest fusion project

Context

ITER is the world's most complex scientific infrastructure project: a €20 billion+ international fusion reactor under construction in France, involving 35 nations across seven member parties, the European Union, China, India, Japan, South Korea, Russia, and the United States (ITER Organization, 2024). Components are manufactured on three continents and assembled at a single site. It is, by design, one of the most relationally complex infrastructure projects ever attempted. One interviewee who worked on ITER in project management, reporting to the European Commission through Fusion for Energy, described it as "the greatest project in the nuclear field".

Construction started in 2010, but by 2013, ITER was in serious difficulty. A management assessment warned the project would fail without change, identifying what reviewers described as a weak leadership team, inflexible and top-heavy management, slow decision-making, and the failure to foster an effective project management culture (Clery, 2014; Physics World, 2022). Cost estimates had already ballooned from an initial €5 billion to over €13 billion. Several members, notably the United States, openly questioned whether they should continue to participate.

The CEO of a United Kingdom government-owned energy fusion delivery body, interviewed for this research, described ITER's governance

as having *"so many constraints in terms of top level governance work share... work share was the thing that really dominated the discussions."* He added: *"I'm actually incredibly impressed that the team's got as far as they have with that set up because it's very challenging"*. Another interviewee who had worked on ITER noted the profound impact of cultural differences across the multinational partnership, describing how tough it was managing relationships across the world and working across cultural boundaries.

What they did

In 2015, the ITER Council appointed Bernard Bigot as Director-General with an explicit mandate to reform. Bigot reframed the project around its scientific vision: the proof that fusion could work at scale, a collective achievement that no single nation could claim alone. The vision and Bigot's narrative encouraged collaboration as partners felt more invested in this historic endeavour. Bigot then matched that narrative with consistent conduct: reorganizing governance, empowering clear decision-making authority, establishing a credible schedule, and rebuilding inter-party cohesion through sustained personal engagement (ITER Organization, 2019). The ITER Council unanimously reappointed him for a second term in

2019, an extraordinary vote of confidence in a project that had previously struggled to maintain stakeholder commitment.

What changed

Under Bigot's leadership, ITER recovered credibility. Construction advanced, building assembly began, and member confidence was restored. The project reached over 75% completion toward the first major proof of concept, first plasma. But in May 2022, Bigot died unexpectedly, and the project experienced what was described as a *"rather traumatic transition in leadership"* (Moyer, 2024). The first plasma milestone slipped from 2025 to 2034, full operations to 2039, and costs rose by a further €5 billion. There was no formal process in place to transfer the relational capital Bigot had built, including the trust, the informal problem-solving channels and the diplomatic relationships that held seven parties together. The project went through an interim Director-General before Pietro Barabaschi was appointed in October 2022. Barabaschi inherited quality issues in delivered components, loss of trust with the French nuclear safety authority, and what he described to the European Parliament as a lack of staff motivation driven by an overoptimistic schedule and unachievable objectives (Fusion for Energy, 2023).

The story does not end there. Barabaschi moved systematically to address not only the technical backlog but the relational damage. He rebuilt trust with the regulator, restructured governance to restore transparency, and reset staff expectations around a credible baseline. By 2026, following deliberate

organizational and relational reform, the project was executing against its revised Baseline 2024 with greater confidence, with Barabaschi describing 'a real turnaround' in project execution (ITER Organization, 2026; Barabaschi and The ITER Team, 2025)

What this means

Bigot demonstrated that in even the most structurally hostile environment, a compelling vision and narrative, combined with consistent relational conduct, can restore a project close to collapse. His death showed what happens when that narrative and competence are embodied in one person rather than embedded in governance. And Barabaschi's recovery showed that deliberate, systematic relational reform can rebuild what was lost, but at significant cost in time and money that better governance would have prevented. The project has since been improved, but the years and cost that it took are the price of having left relational capital ungoverned in the first place.

The narrative, the relational competence, and the continuity are not three separate leadership qualities. They are one discipline.

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 CASE STUDY 4

Making the invisible visible: measuring relationship health on a first-of-kind energy program

Context

A major United Kingdom government-backed energy program is one of the most technically ambitious infrastructure initiatives currently under development in the United Kingdom, a first-of-kind program with no precedent for how its key inter-organizational relationships should be structured or managed. The program is delivered by a newly established delivery authority working in close partnership with a public-sector technical research body whose expertise is irreplaceable to the program’s success.

Both organizations recognized from the outset that the relationship needed a strategic model. Despite this, the program had no systematic mechanism for assessing relational health, no shared language for discussing relational concerns and no governance structure through which relationship risk could be formally tracked.

What they did

MIGSO-PCUBED carried out a relationship health assessment to allow the partners to understand the real state of their relationship, surface gaps and co-develop target metrics with joint action plans. The intervention covered four phases:

Phase 1: Capturing impressions	15+ structured interviews across both organizations, from senior governance roles to working-level practitioners, covering process issues (resource planning, systems, IP) and behavioral ones (culture, communication, interpersonal trust).
Phase 2: Sharing impressions	Each organization independently identified its top relational concerns. The two lists diverged significantly, surfacing not shared priorities but different framings of the same relationship.
Phase 3: Co-developing metrics	Both organizations consolidated their impressions into a shared metric, a jointly owned baseline of the relationship’s current health across 10-plus characteristics.
Phase 4: Action plans	Three joint action-plan groups were formed with participants from both organizations. All plans were signed off by senior leadership and are tracked monthly in board meetings.

What changed

Structured measurement gave both organizations a shared, evidence-based understanding of where their relationship actually stood. This allowed both organizations to agree on a jointly owned metric.

Relationship health now sits on the program board alongside cost, schedule, quality and risk, providing a leading indicator that enables intervention before relational issues become program crises. Both organizations now have greater confidence that the relationship will sustain the collaborative performance the program requires.

Leader voice

“In the project, we’re trying to set this up from the start in a way that reduces the likelihood of it going wrong. If you focus on the positive achievement of an objective, you will minimize the risks. If you just focus on avoiding the risks, you won’t avoid them, they’ll actually happen.”

CEO, Major United Kingdom Energy Project



🔍 CASE STUDY 5

Building the capability to collaborate: relational investment in Australia's water infrastructure

Context

Seqwater is the Queensland Government's bulk water supply authority, responsible for delivering safe, secure water to more than 3.8 million people across South East Queensland (Seqwater, 2025). It is currently undertaking its largest capital investment program to date, the Dam Improvement Program, upgrading several major dams to meet modern engineering and safety standards, alongside water security investments including new pipelines, treatment plants, and desalination capacity (Seqwater, 2023). Seqwater oversees a portfolio of more than \$7 billion in projects, making Seqwater one of the most significant capital delivery organizations in the Australian water sector.

What they did

Seqwater's approach to relational capability was built on three investments.

First, leadership ownership was non-negotiable. Seqwater insisted that its own leaders would always head its projects, project directors, project managers, and technical leads. As the General Manager explained: *"We want Seqwater leaders leading our projects... we want Seqwater leaders to be very much the outward-facing as well as providing the leadership."*

Second, behavioral capability was assessed during procurement and enforced throughout delivery. On one of its largest current projects, a dual ECI process was run with a behavioral coach embedded in the workshops. When a commercial lead demonstrated non-collaborative behavior, refusing to share risk, the individual was escalated and removed. *"We have a behavioral coach who participates in our ECI workshops to assess how we're working together. We've had people changed out because we didn't think they were a good fit for the relationship we want to have."*

Third, trust was formally measured as an organizational KPI through a six-monthly survey measuring community trust, shareholder sentiment, and media impact. Following Tropical Cyclone Alfred, Seqwater recorded its highest-ever community trust score, rising to 70%. Teams were co-located with integrated org charts and a single email domain regardless of employer. Executive-level meetings focused explicitly on the quality of the relationship, *"how we're working together and how we're feeling"*, not just project performance (Seqwater, 2026).

What changed

On a \$1.2 billion flagship project, a partner who had initially refused to engage was transformed within four months of deliberate relationship-building into a willing collaborator, achieved through escalation and personal engagement, not contractual pressure. Community trust scores have remained high through COVID-19, the Brisbane floods, and Tropical Cyclone Alfred, demonstrating that relational capability is not an innate cultural trait but a buildable, measurable organizational competence.

Leader quote

“In Australia, there's a lot of importance put on relationships... you spend a lot of time going and having a coffee with someone or having breakfast with someone, and sometimes for no reason at all, it's just about the relationship and the network.”

Melanie Gordon

General Manager for Capital Delivery, Seqwater

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About Project Management Institute (PMI)

PMI is the leading authority in project management, committed to advancing the project management profession to positively impact project success. We empower professionals to excel in project management practices through our growing global community, knowledge sharing, and best-in-class certifications—driving positive change in organizations and communities. Since 1969, our unwavering mission has been to advocate for the profession by offering lifelong learning and connections to sharpen high-demand skills.

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About MIGSO-PCUBED

MIGSO-PCUBED is a global project, programme, and portfolio management consultancy trusted by leading organisations to deliver their most complex and strategically critical initiatives. We combine deep sector expertise with hands-on delivery experience across infrastructure, energy, financial services, technology, and beyond, embedding skilled professionals within client teams to strengthen governance, improve delivery performance, and build lasting capability. Our approach blends practical, on-the-ground project management with applied research and thought leadership, ensuring the methods we deploy are grounded in both experience and evidence.

Our work has three core areas of focus:

- ▶ **Delivery excellence:** Provide hands-on programme and project management support to keep complex, high-stakes initiatives on track, on budget, and aligned with strategic objectives.
- ▶ **Operating model and governance design:** Help organisations structure PMOs, governance frameworks, and ways of working that scale with the complexity of their portfolios.
- ▶ **Collaboration and relationship management:** Strengthen inter-organisational relationships and stakeholder alignment, recognising that successful delivery depends as much on people and partnerships as on process.

Grounded in real-world delivery experience and collaborative research, our work helps clients navigate complexity and deliver with confidence.

About University College London

Founded in 1826 in the heart of London, University College London (UCL) is London's leading multidisciplinary university, with more than 18,000 staff and 51,000 students from over 150 different countries. UCL is consistently ranked as one of the top ten universities in the world (QS World University Rankings 2010-2027) and was the first university in England to welcome students of any class or religion, and the first to welcome women on equal terms with men.

The Bartlett, UCL's Faculty of the Built Environment, is UCL's centre of excellence in the management of projects and construction economics. The Bartlett is ranked number one in the world for Architecture and Built Environment studies (QS World University Rankings 2026) and according to REF 2021, is where the UK's most 'World Leading' and 'Internationally Excellent' built environment research is undertaken.

About PMI Thought Leadership

We are a multidisciplinary team of subject matter experts, experienced leaders and researchers dedicated to creating, retaining and disseminating innovative and thought-provoking project management research and content. Partnering with the PMI community, industry thought leaders, academia, and prominent authorities, we build and sustain a community-generated knowledge platform. Thought Leadership is dedicated to offering cutting-edge perspectives, bridging academic theory and practice, contributing meaningfully to solving problems and providing solutions to a broad, diverse global community spanning from early career professionals to executives. We are committed to the diversity of opinions and community contributors to represent all voices of the project management profession equally.

Our work has three core areas of focus:

- ▶ **Individuals:** Equip project professionals with high quality, actionable recommendations based on practical experience and academic research to drive individual growth, performance and continuous learning.
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