

The Deloitte logo is displayed in a bold, dark blue font. The word "Deloitte" is followed by a period. The background of the entire slide is a long-exposure photograph of a tunnel, showing light trails from vehicles in various colors like yellow, red, and blue, creating a sense of motion and depth.

Deloitte.

Delivery remodelled
The capability approach

Capital Projects
Insights

Contents

How can we deliver capital projects more efficiently?	1
What should your delivery model look like?	3
What capital project capability do you need?	6
When is the capability required?	8
What does this mean for your project?	10
Contacts	12

Capital Projects Insights is a series of papers bringing together the latest thinking from members of our global team on optimising performance and value across the lifecycle of capital projects. Read other editions at www.deloitte.co.uk/icp

How can we deliver capital projects more efficiently?

In the midst of commercial pressures from regulatory change and greater public scrutiny on delivering value for money, this is an ever more important and challenging priority for capital projects teams in both the public and private sectors.

The UK Government's Infrastructure Cost Report 2010 identified the opportunity to improve delivery and make efficiency savings of at least 15% by 2015.¹ The subsequent Construction 2025 Strategy goes even further, setting a target of lowering costs by 30% and reducing time by 50%.²

Incremental efficiency gains have been made on projects to date, but is it time to challenge the foundations of traditional delivery models to really move the needle?

Missed a step?

Setting up the delivery strategy and organisation at the start of the project is, of course, critical to success.

Surprisingly though, often little focus is given to mapping what capabilities – people, processes and systems – are required for the project before a delivery strategy is developed and partners are engaged.

Instead, the default is to select a delivery model based on considerations such as risk appetite and project complexity. While this traditional approach may provide a short-term fix to plugging a capability gap, it often leads to the development of inappropriate and/or insufficient capability, it may well not support the longer-term objectives of the organisation and is a root cause of many common delivery issues, for example:

- **Inefficient overhead:** An organisation decides to scale back its capital expenditure programme, but does not fully consider the changes required to its capability, resulting in a heavy client organisation and inefficient overhead.
- **Reduced ROI:** An organisation that is rapidly growing begins delivering larger and more complex projects and a contractor is brought on board to manage projects on the client's behalf. However, client-side capability and interactions with the contractor are not adequately considered, leading to a loss of control, no real risk transfer and an overly heavy construction management presence which reduces the project's return on investment.

1 Infrastructure Procurement Routemap 2013, Infrastructure UK

2 Construction 2025: industry strategy for construction – government and industry in partnership, Department for Business Innovation & Skills, UK

Starting by mapping the capabilities required to deliver the project is critical to supporting and managing the chosen delivery model. This avoids inefficiency, enables better decision-making, management of risk and improves control.

3 Construction 2025: industry strategy for construction – government and industry in partnership, Department for Business Innovation & Skills, UK

- **Risk exposure:** A project progresses through its delivery phases, but insufficient consideration has been placed on building the appropriate client-side capability to manage the new risk profile as it evolves over the lifecycle of the project. This leaves the client exposed whilst time and money is spent putting new capability in place rather than focusing on delivering the project.
- **Redundant technology:** An organisation invests in new capital delivery technology without considering the capabilities or organisational change required to embed and utilise it, eroding the return on investment and benefits of the system.

Time for a new approach

“Increased capability in the construction industry supply chain is seen as the one of top 3 factors to reducing cost, increasing delivery efficiency and improving sustainability in UK construction by 2025.”³

Starting by mapping the capabilities required to deliver the project is critical to supporting and managing the chosen delivery model. This avoids inefficiency, enables better decision-making, management of risk and improves control.

Doing this consistently well and getting this consistently right will result in real and marked improvements in the outcome of capital projects. Planning and delivering the required capabilities in a structured and coordinated way can also support delivery against wider organisational objectives and long-term vision.

This paper isn't just about choosing the right delivery strategy. It goes a step further to explore how the chosen delivery strategy impacts a capital projects organisation in terms of both the definition of the capability it requires and making the transition to this target end-state.

Embedding the capability approach

There are three overarching questions relating to capability to consider when setting up to deliver a capital project:

- What should your delivery model look like?
- What capability do you need?
- When is the capability required?

Answering these points enables the definition of a delivery strategy, its core components, and how the organisation's capabilities need to change over time, thereby setting up the project to deliver real value efficiently.

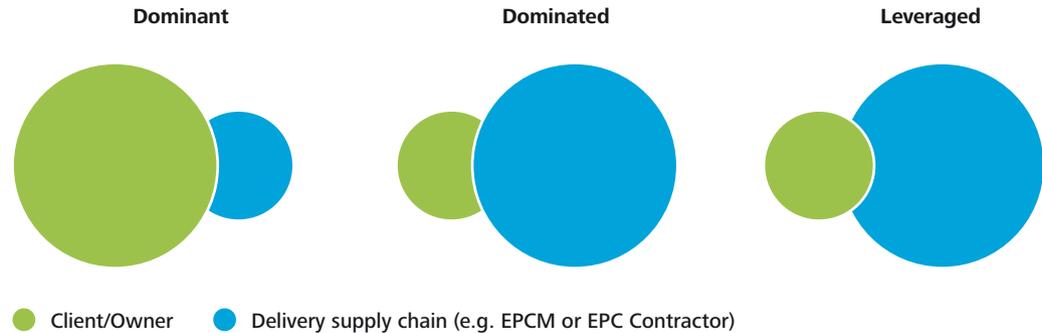
What should your delivery model look like?

Choosing the right approach to delivery varies from project to project, and across industries. The decision needs to be driven by a number of factors, both internal and external to the organisation.



At the core of the delivery model definition is of course the decision on the owner/operator model to be adopted. This determines the organisational set-up, where accountability lies and the role of the client during delivery. Getting this decision right upfront enables definition around roles and responsibilities which, when ambiguous, can lead to decision gridlock, a lack of delegation or decisions being delegated inappropriately.

Three main types of client/owner models

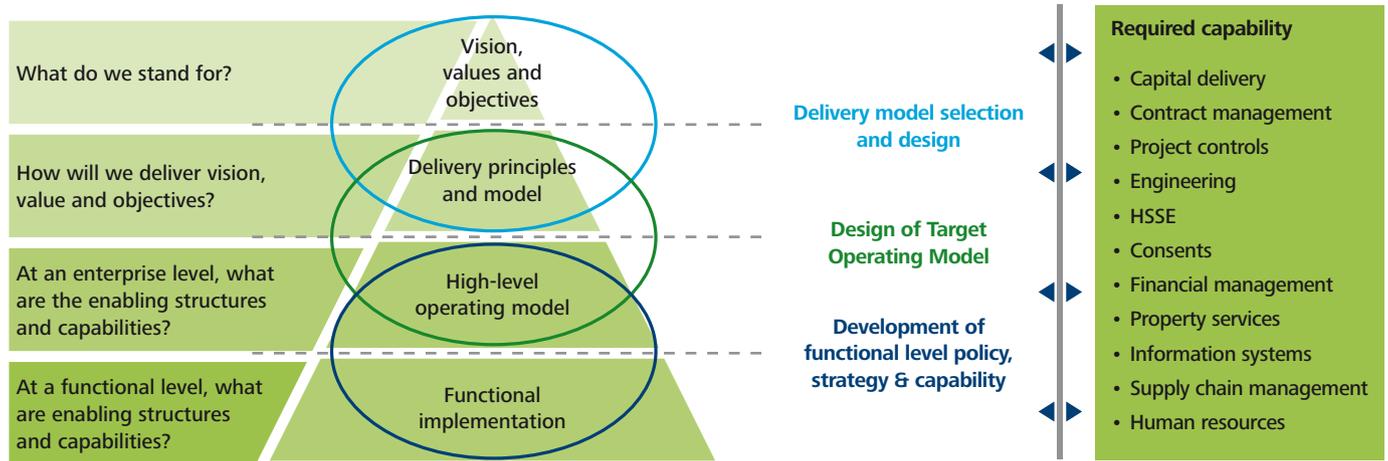


Organisations may choose to perform multiple roles and/or contract third party partners to support delivery. There is no right or wrong answer. However, it is vital to:

- Be clear on and accurately articulate the client/owner's role(s)
- Define who is accountable for what

- Proactively manage interfaces
- Encourage appropriate levels of collaboration
- Incentivise each layer of the delivery organisation.

Figure 1. The capability framework



The capability framework provides a 'hierarchy' from vision and values through to functional implementation, and alignment to capabilities should occur at each one of these design levels.

To inform the selection of the delivery model, including the owner/operator model, an assessment of existing capability and a definition of the target capability required to execute the delivery strategy should be undertaken.

Case study: Ensuring the capital delivery operating model is future proof

Global mining company

This global miner's move towards following a more dominant delivery model resulted in challenges in executing major projects, triggering a transition back to a more traditional, leveraged owner model.

Key stakeholders in the capital delivery organisation were interviewed to better understand workload and capacity constraints, and identify potential shortfalls in capabilities and governance.

It was then possible to develop a plan to resolve the capability gap in the overall operating model, which was also robust for the future project pipeline, giving them a transition roadmap to a more effective approach. This triggered a transition back to a more traditional, leveraged owner model.

What capital project capability do you need?

A project's capability requirements are not static – what an organisation needs to excel at will evolve as it moves through the delivery lifecycle.

Taking the long view

Considering the long-term view is key as this is often where value is lost. Traditionally, clients appoint project delivery partners when they recognise their own organisation doesn't have the capabilities required to deliver the project.

Whilst this conventional approach can provide a short-term fix, it may not be aligned to the longer-term objectives of the organisation.

A delivery partner usually has limited "skin in the game", is difficult to incentivise and reduces client-side control. Additionally, a delivery partner does not always react to the need to rapidly downsize when there is a need to quickly reduce capex or resources and capabilities.

The traditional approach of selecting a delivery model based on considerations such as project complexity and risk appetite must be supplemented with an assessment of the capability that is required to successfully execute in order to derive real value from the chosen delivery strategy and fully understand what capabilities are expected from any delivery partners.

Our approach considers how capability fits in with the wider picture and the long-term value that can be derived.

Consider how much value could be generated:

- From a delivery partner if the capabilities required were mapped out before the partner was engaged
- By consciously building the right level of capability to deliver your long-term strategy
- By ensuring that the right skill sets are being deployed and utilised across the portfolio or projects
- By leveraging technology efficiently to manage information and reporting over the lifecycle of capital projects.

Figure 2. Operating model layers



Defining your target capability

Capability encompasses much more than people and processes. A coherent approach to defining the internal capability required is necessary, looking at how five key business elements: organisation, process, governance, technology, information and data come together to form an operating model (see Figure 2 above).

These components or ‘layers’, do not exist in isolation, but are interwoven with each other enabling an integrated and efficient design of the delivery organisation. Each layer of the operating model is underpinned by the principles defined in the overall delivery strategy.

When defining target capability for a project, key principles relating to the project and the organisation should be established to guide the design of the operating model. These principles should provide sufficient clarity to shape design but not attempt to articulate the solution and are important in driving a consistent understanding.

It is imperative to consider the current capability of the organisation and identify capability gaps that need to be bridged to successfully execute the delivery model. Weighing up the available options to address these gaps (building internally or outsourcing), should be made in consideration of the long-term impact of these options in terms of risk, flexibility and cost.

When is the capability required?

To effectively transition to the target end-state, it is important to understand when each capability is needed and the activities required to get these capabilities in place, in sufficient time.

A capital project creates dynamics that result in a need to have certain organisational capabilities in place at particular points in time as the project progresses. This is driven by three parallel lifecycles (see Figure 3 overleaf) – each with connected, but unique objectives and characteristics which are influenced by a range of dynamic forces – as well as the knock-on effects of associated change between them. There may also be external factors that contribute to timing and scale of required capabilities.

A Transformation Roadmap is key to mapping out capability requirements over time, driven by these three lifecycles. This should focus on:

- Outlining key changes over time
- Defining all support activities considering organisation, process, governance and technology requirements
- Defining and scoping key implementation activities and work streams, including a deliverables/milestones timetable
- Estimating resourcing requirements in order to formulate a transformation budget
- Ultimately aligning capabilities with requirements.

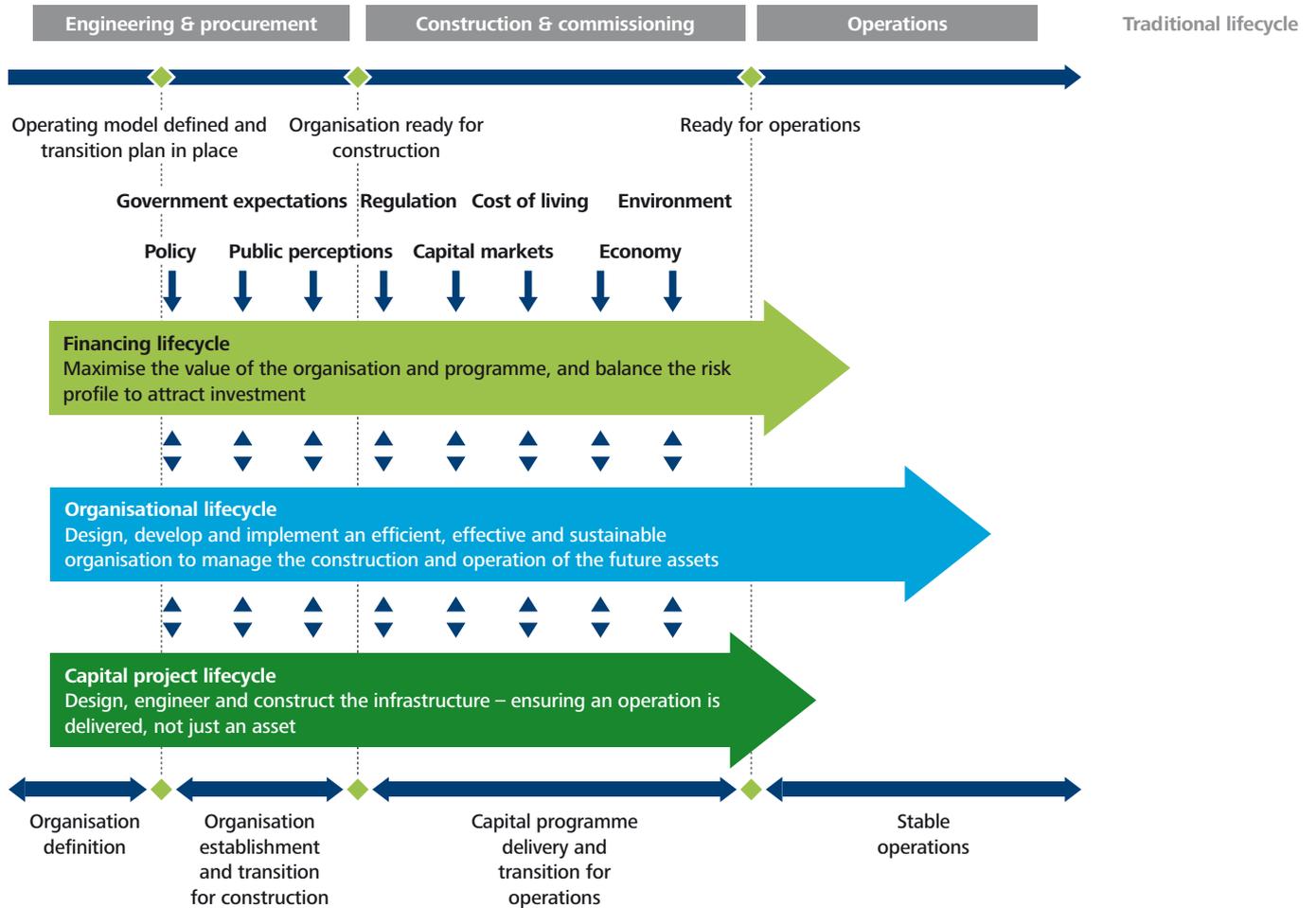
Case study: Planning and transitioning capabilities in and out to support a dynamic capital project lifecycle

Thames Tideway Tunnel Project, UK

The construction phase of the Thames Tideway Tunnel project (TTT) will be undertaken by a new, stand-alone entity. Deloitte assisted TTT in the design of the operating model for this new entity, reflecting the size of this undertaking, the length of the project and the complex stakeholder environment, thus requiring an operating model with the ability to transition capabilities in and out over the lifecycle.

TTT required a defined target state operating model for construction and commissioning phases, encompassing organisation, process, information, technology and governance. Implementation and transition management plans for TTT were developed, which allowed them to understand how the organisational capabilities would be built over time, and what internal changes and interfaces would need to be managed.

Figure 3. Capital project lifecycle



What does this mean for your project?

Developing a clear understanding of the capabilities required throughout the lifecycle of a capital project can both optimise efficiency and value in delivery, as well as supporting the achievement of broader organisational objectives over the longer term.

Mapping capabilities before a delivery model is selected is optimal, however this approach can also be applied at key stages of ongoing projects, such as from design to delivery and delivery to operations. The required capabilities and risk profile will evolve over the delivery lifecycle, and planning each stage upfront will allow for efficient resource allocation and proactive, long-term capability decisions.

By taking the long view, incorporating a capability assessment into the traditional approach for selecting a delivery model, risk can be reduced and value maximised.

Deloitte's specialists have extensive experience in supporting clients in setting their capital projects up to succeed, from building a new delivery organisation from scratch, such as the Olympic Delivery Authority and Thames Tideway Tunnel, to supporting capital intensive organisations in expanding their capex programmes.

Within this paper we have set out key steps that our experience tells us are required to set up effectively for delivery:

- Developing a clear view of required capabilities
- Planning capability requirements and how they will change over time
- Developing a delivery strategy that articulates the delivery model
- Building an organisational development and transition plan to support the changing requirements.

Case study

London 2012

LOCOG required support in defining and developing an Operating Model with the functionality to evolve over time. LOCOG's accelerated lifecycle meant it needed to grow from zero to over 200,000 workers and decrease to near zero again within just seven years. We employed a collaborative approach to work with LOCOG to define the operating model requirements and capabilities through multiple stages across this lifecycle.

We believe that these are fundamental and need to be tackled before appointing delivery partners, developing a commercial strategy and defining procurement packages.

We would be delighted to discuss what the capability approach could mean for your capital investment programme. Please contact us through your usual Deloitte contact or email our team at infrastructure@deloitte.com.

Case study

Crossrail

Crossrail is Europe's largest construction project, with over 40 large construction sites creating a significant challenge for project and programme controls. We led the development of Target Operating Model for Crossrail's delivery organisation that elevated the strength and capability of its Project Controls function, prioritising the IT and Process components. As a result, Crossrail gained a single integrated Programme Controls organisation, with reduced overall headcount, the demonstration of which played a key part in Crossrail's successful Major Projects Review Group assessment.

Deloitte Infrastructure & Capital Projects: Beyond tomorrow

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Our global Infrastructure and Capital Projects team offers an end-to-end service for investors, developers and operators across the entire lifecycle of an asset, bringing together world-class best practice and market-leading expertise with in-depth knowledge of local markets and the range of infrastructure asset types.

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