



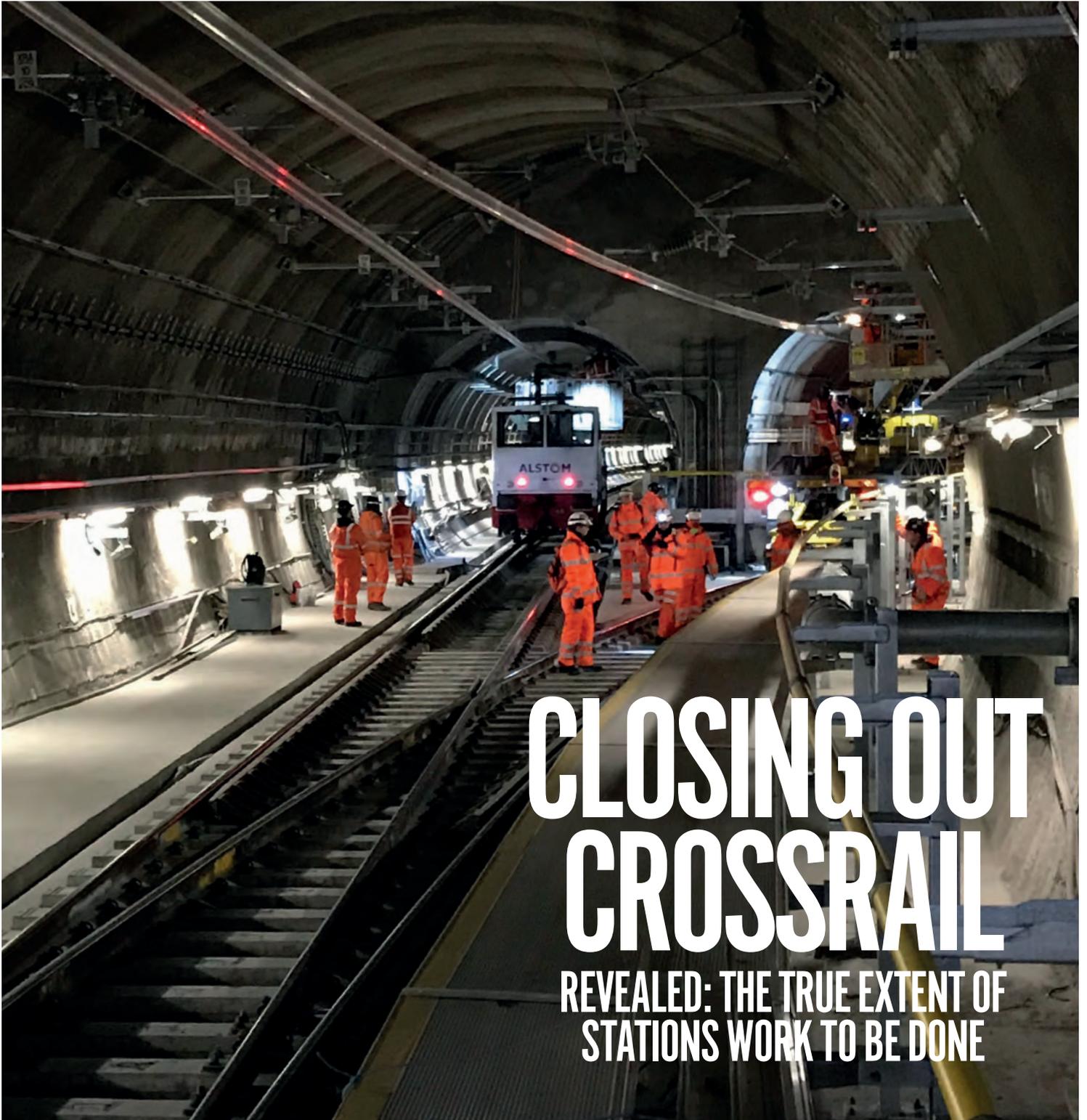
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# New Civil Engineer

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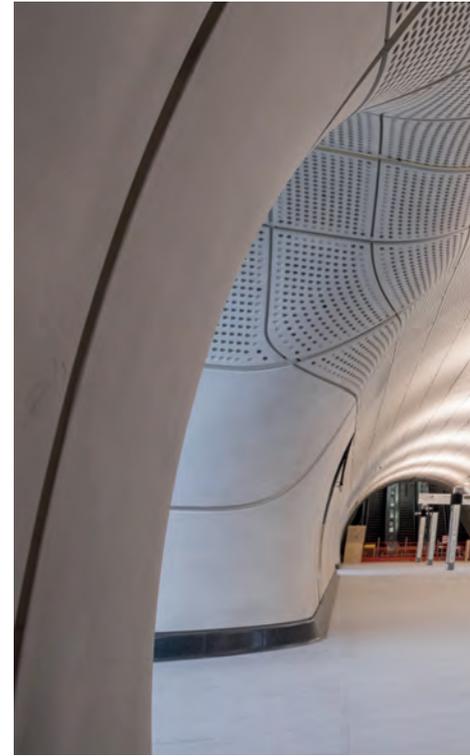


## CLOSING OUT CROSSRAIL

REVEALED: THE TRUE EXTENT OF  
STATIONS WORK TO BE DONE

# HOW TO DELIVER

Crossrail's unfolding problems suggest the management team was out of touch with the scale of issues it faced. **Emily Ashwell** asks how project leaders can stay in the know and keep programmes on track.



**A**fter the successful delivery of the 2012 Olympic infrastructure, expectations that Crossrail would emulate its on time, to budget delivery were high.

It was not to be. Today, three months after its scheduled completion, the project still has no firm opening date, its chief executive and chairman have been ousted and the project is running massively over budget. But if Crossrail is an example of project management failure, what should the leaders of major projects do to ensure they succeed?

The London 2012 scheme left a website full of learning legacies for current and future projects to work from. Former Olympic Delivery Authority (ODA) chair Sir John Armitt, now chair of the National Infrastructure Commission, argues the sector has project management expertise and that many projects are successful, but he says problems can surface if the project culture is not right.

"I think so often these things come back to personalities, they come

## KEY FACTS

**2012**  
Start of  
the London  
Olympics

**2011**  
Completion of  
London 2012  
project

back to the culture which sits within a project, and if you've got a very commercial, contractual, legalistic approach sitting within a project then it will bode ill," he says.

"I often say: 'is there anything new to learn and is our problem that we just don't carry forward consistently what we already know?'" he adds.

He recalls the 1970s when the Major Projects Association would run seminars on successful project delivery as the UK underwent a major programme of motorway and power station building.

It is a generally accepted view that, from the 1980s, the UK began to lead the way in civil engineering project management. But as projects

**“ So many of these things come down to personalities, they come back to the culture**

have evolved to involve increasingly complex systems, how well suited are those project management skills to today's challenges.

"We need good project management, but as it is currently defined and practiced it isn't really sufficient as a management discipline to plan and deliver these very large infrastructure programmes," says Simon Murray, former major projects director at airport operator BAA and rail infrastructure owner and operator Railtrack and now a non-executive director of Highways England.

"Everybody's been through the same training, buys into the same ideas, and the same ways of doing things and I think we need, as far as practices are concerned, much more emphasis on planning and managing production in a project rather than just planning and managing subcontracts and the overall critical path."

He warns that this singular culture means "ears and eyes are shut" to good ideas, but admitted that there was great variance in terms of openness to new ideas.

Armitt argues that much of the ODA's success was because of the collaborative culture in the London



## Leaders must have high levels of emotional intelligence

have mastered an ability to manage their own anxieties and reactive mind concerned with serving their own ego or individual preferences. They have developed a mindset to serve the greater project and societal interests. They recognise anxiety or uncertainty in others and aim to support and explore in an open-minded way when things do not go to plan.”

Anthony Fitzsimmons is chair of Reputability, a consultant specialising in reputational risk. He says most major crises are predictable, particularly to well-informed outsiders; and most are avoidable. But he says personalities can often block a culture of openness.

“It is too common for leaders to react with hostility to bad news, for example by shouting or worse,” he says.

“If it is known that someone is unreceptive to bad news, many people will think it is unpleasant and risky to pass on bad news, and potentially bad for their career.

“Another problem can be that people get disheartened about raising problems if they believe nothing will change as a result. So, leaders are left in the dark until it is too late.”

There are also questions about the governance of projects that have boards akin to those in private sector businesses – particularly given the apparent lack of awareness of the severity of Crossrail’s problems at the highest level within the organisation. Are project board members furnished with accurate information about the intricacies of how a project is performing in the same way business boards members are in general?

“I suspect that they are not,” Murray surmises. “I suspect if you compare the board of a large infrastructure company with the board of one of our large retailers or manufacturers, I suggest the board of the retailer or manufacturer has far more information about what’s going on.” **N**

2012 project.

He adds that an open and collaborative culture has to start at the top, with the client, and must run through aspects including the procurement and contractual arrangements. This is what happened at the ODA, which was charged with delivering the six year London 2012 build programme, one year of the Games themselves.

Pain/gain financial arrangements were one example of this approach.

“It was very much a contract which incentivised designers and contractors to work together to keep it underneath the target price because there was a lot more upside for them,” he says.

There are examples of new projects that are trying to do things differently by instilling a truly open and collaborative cultures within project teams.

The Highways England team developing the Lower Thames Crossing is endeavouring to adopt this approach. It has engaged business psychology specialist Temporal Consulting to advise on this following its previous work with teams such as Connect Plus, which

### Farringdon Crossrail station

maintains the M25.

Temporal Consulting business partners Nicola Temporal and Simon Cavicchia use the term VUCA – volatile, uncertain, complex and ambiguous – to describe major engineering projects.

“The more successful versus less successful projects seem to have a working culture led by leaders and leadership teams that have aligned around the acceptance and understanding that they are in this environment that needs constant attention if the time, cost and quality, aspects of a project are to be successfully monitored, balanced and delivered to the satisfaction of all stakeholders,” says Temporal.

Success means building resilient teams that can work in this complex environment, she says, adding that failure to do so often results in low levels of collaboration, innovation and increases in overall silo working, conflict, stress and waste.

To combat this, leaders must have high levels of emotional intelligence, with an understanding of how their response to situations impacts the overall project.

“These leaders are self-aware, and