



Five Dimensions that Define Value in Modern Infrastructure Projects

Value is an interesting word. Look in a dictionary and you'll find several definitions. The simplest is the monetary worth attached to something. Value also relates to whether something is important or beneficial. Finally, a value is a standard of behaviour or a judgement about what matters in life. All of these are relevant to infrastructure projects and frameworks.



Modern transport infrastructure is highly interconnected with how we live. The decisions we make as an organisation affect the quality of people's lives and the environmental legacy we leave behind for future generations.

Reflecting the variety of meanings of the word value, our **value driven approach** works across five dimensions: efficiency, certainty, innovation, sustainability and transport management.

These reflect different aspects of 'value' for customers, funders, travellers and society. They are also rooted in what we value as a business.



1. Value Through Efficiency

Time and budget are inescapable constraints. Efficiency has to be at the core of every project and framework. But it's much more sophisticated than simply 'working faster.'

Efficiency comes from deploying a range of skills and specialist technical capabilities with a common purpose. Project needs are diverse, which means that our capabilities have to be dynamic and ready for rapid deployment. Efficiency also demands rigorous planning and programme management.

Dynamic Capabilities

Rapid deployment of diverse capabilities isn't easy. It happens when partnership working with design teams and specialist supply chain partners is nurtured through genuine collaboration. Cultural alignment is vital so that everyone remains focused on the needs of the project rather than the needs of their organisation.

Octavius invests heavily in improving our collaborative culture and in developing our supply chain. This approach extends our capacity so we can quickly bring together diverse skills and experience and work together as a single team. Rapid deployment of expertise is vital when responding to emergencies such as landslips, flooding or failures on the rail or highways networks. For planned maintenance it's often the best guarantee of meeting quality, timing and budget constraints.



Planning and Programme Management

Effective planning starts with the desired outcomes and works backwards. This means considering a broad range of outcomes including reduced disruption, environmental improvements and simplifying future maintenance.

Mid-programme, when methods have already been set and scheduled, isn't the time to consider broader value considerations. They have to be identified up-front and programmed into the design and delivery of the project.

The ability to quickly bring together diverse expertise helps us to grasp any opportunities to reduce lifetime costs and minimise short-term disruption.



2. Value Through Certainty

Those who own, operate or use our transport networks clearly place great value on certainty.

Timing and Budget

Confidence that work will finish on or ahead of schedule, that budgets will be controlled and that the asset will perform as specified is the very bedrock of value.

Budget and project control must be rigorous and transparent. Both must be complemented by detailed risk management. Anything that could nudge things off course is anticipated so that mitigating measures can be implemented immediately.

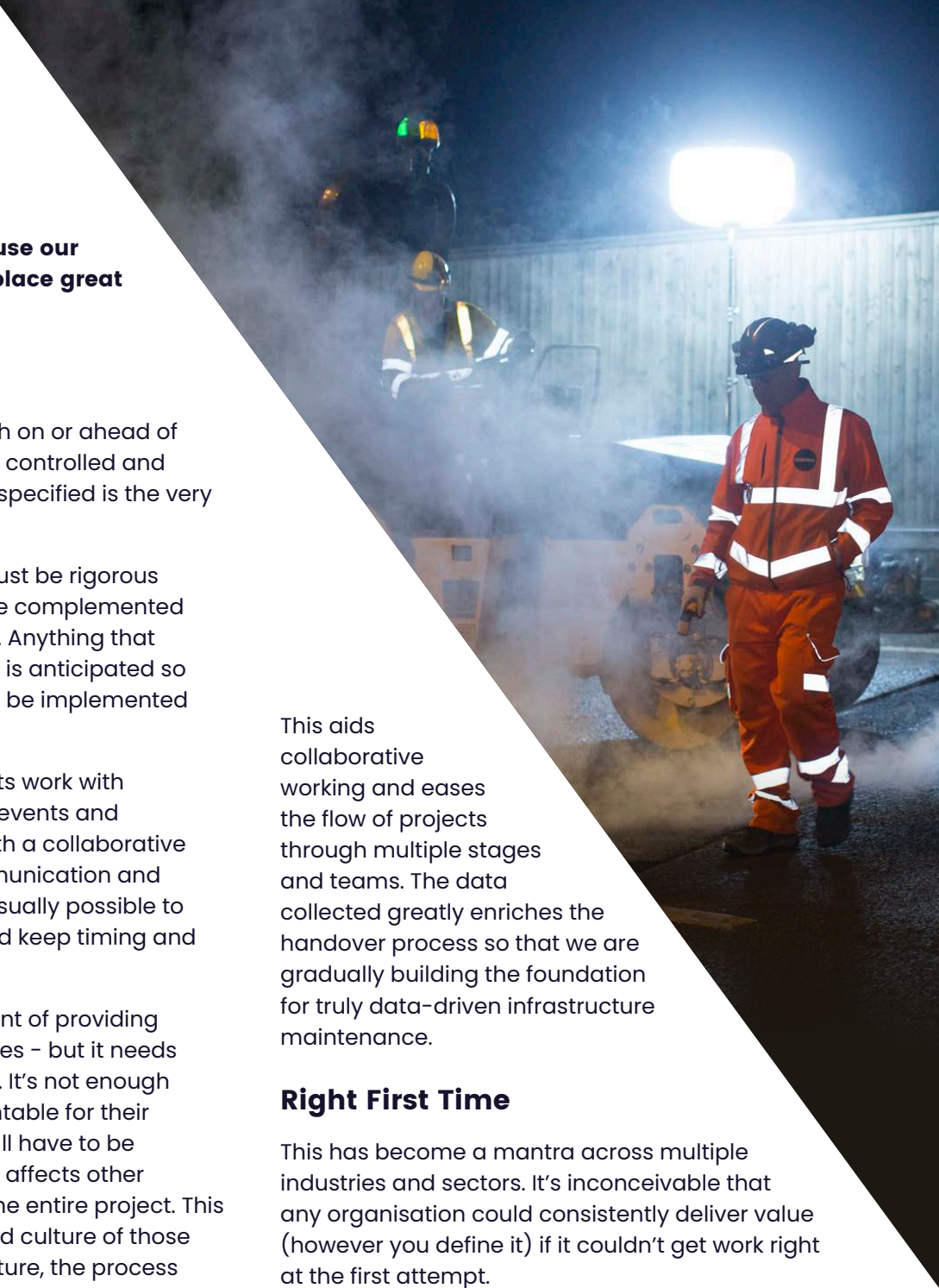
The reality is that most projects work with incomplete data. Unforeseen events and complications are normal. With a collaborative approach, short lines of communication and unified sense of purpose it's usually possible to work through these events and keep timing and budgets on track.

Accountability is a vital element of providing certainty over project outcomes – but it needs to be seen in the right context. It's not enough for each partner to be accountable for their own stage of the project, we all have to be accountable for how our work affects other partners and the success of the entire project. This is a reflection of the values and culture of those involved. Without the right culture, the process always has an uphill battle.

Data

The transport network is increasingly data-driven. Accurate and timely project data facilitates accountability, while detailed asset data helps with the planning and efficient execution of future maintenance. The better data we are able to collect and share, the greater certainty we can all have about resilience, costs and likely disruption to the network.

One of the most exciting developments in recent years is the ability to share live asset information with remote teams.



This aids collaborative working and eases the flow of projects through multiple stages and teams. The data collected greatly enriches the handover process so that we are gradually building the foundation for truly data-driven infrastructure maintenance.

Right First Time

This has become a mantra across multiple industries and sectors. It's inconceivable that any organisation could consistently deliver value (however you define it) if it couldn't get work right at the first attempt.

With rail and highways projects the stakes are particularly high. If operations didn't work out as they were supposed to the results are likely to be overruns and massive inconvenience. The risk under this pressure to deliver is that innovation gets squeezed out because it isn't proven.

In addition to careful project and risk management, Octavius actively cultivates relationships with specialist supply chain partners that have experience of implementing better and more efficient methods. We frequently practise new techniques offline through mock-ups and prototypes so we can ensure they can be implemented successfully on the live project.

3. Value Through Innovation

If the industry sticks to what it already knows how to do, we will never make progress. The resilient, data-driven, efficient and accessible transport network our nation needs will remain an aspiration.

The industry is learning to become more adept at innovation. But the pace of change needs to accelerate through more widespread and consistent use of technologies such as BIM, Digital Asset Management and Digital Surveys. While there are still some technical issues to refine we have seen, across multiple projects, how digital information sharing improves project outcomes.

Information sharing provides the certainty that allows innovations to be de-risked. Greater capabilities to 'test and trial' new ideas is fuelling creativity by providing environments where ideas can be proved and refined before implementation.

The process side of innovation is critical and often under-appreciated. Octavius developed the Improvement Opportunity (IO) app that allows our staff and supply chain partners to submit ideas for improvements instantly and from anywhere. Just as importantly, it's supported by a process that ensures that all ideas are acknowledged and evaluated and that successful ones are shared and celebrated.



4. Value Through Sustainability

Sustainability is another term that can be misunderstood or interpreted too narrowly. True sustainability encompasses both environmental and economic factors.

Environment

Through our sustainability audits we look to reduce the resources we consume and the emissions and waste we generate. As well as limiting harm we also seek opportunities to do positive good by improving habitats and encouraging biodiversity.

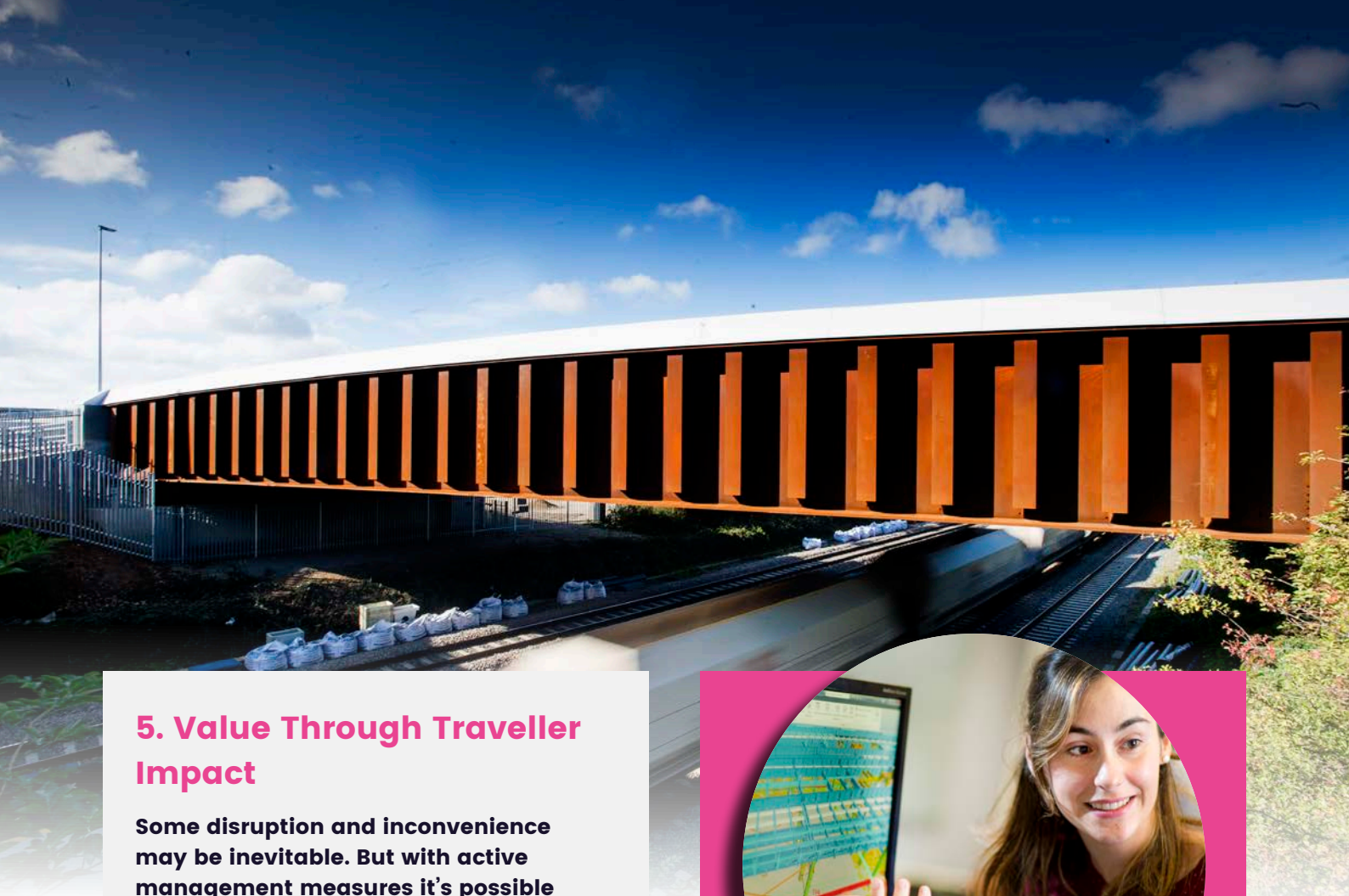
As the industry looks towards meeting the global and UK environmental targets the need to balance the delivery of value between project and the community it is being delivered for will become increasingly important for both buyer and provider.

Economic

We are always conscious of our role in maximising social value through promoting sustainable and healthy communities. We do this by supporting local training and employment opportunities and by working with local supply chain partners, where-ever we can.

We value our involvement in developing and improving community facilities and access with many of the projects we undertake and always look to the legacy benefits that can be achieved to support that community long after the projects have been completed. As one of the biggest sectors of industry in the UK economy we are aware we can have a positive impact on achieving and extending social value.

We aim to offer supply chain partners greater security over future work and access to initiatives such as our IO app and our acclaimed STOP Think! Health and Safety cultural awareness programme.



5. Value Through Traveller Impact

Some disruption and inconvenience may be inevitable. But with active management measures it's possible to minimise disruption and help the travelling public to limit any inconvenience they suffer.

Keeping people moving means analysing passenger flows and providing clear information before and during works. It's often possible to adapt projects to reduce disruption if you have a clear enough understanding of how assets are used.

Agile scheduling is particularly valued on busy routes and in high traffic areas. The aim is to concentrate activity in off-peak periods and ensure that as much work as possible takes place off site. This not only reduces disruption, it also minimises the risks that have to be managed to keep people safe.



Our Value-Driven Approach to Infrastructure

Value may be a short and simple word. When it is applied to infrastructure projects it has a variety of dimensions that have to be understood and managed. Our value driven approach takes each of these dimensions into account.



For more information on how we could help your project please [visit our website](#) or contact us by email: hello@octaviusinfrastructure.co.uk