

Insight Trading

Collaborating to transform the infrastructure that shapes society

THE ROADMAP

The case for smarter infrastructure solutions

CHAPTERS 1, 2, 3

Key ideas and insights

- Major trends and new issues demand more effective, not just more efficient, infrastructure solutions
- The attributes of valuable solutions have changed and if ignored can make or break an infrastructure project
- The potential to achieve lower risk, higher value solutions is vast but under-recognised and largely untapped

Tools and frameworks

- Attributes of project complexity
- Double loop learning (efficiency and effectiveness)

Project case studies

- Gunns Limited forestry products
- Urban water crisis
- Water treatment plant redesign

Mindsets and questions enabling smarter solutions

CHAPTERS 4, 5, 6

Key ideas and insights

- Smarter, sustainable solutions can be achieved in technologically-simple ways
- More simple design delivers numerous strategic, risk and cost benefits
- Design is the expression of intent
- Powerful questions are pivotal to unlocking the latent potential for smarter solutions

Tools and frameworks

- Total project risk profile
- Causal layered analysis
- Questioning ladder

Project case studies

- Asian copper mine
- Major highway realignment
- Wastewater plant transformation
- Murray-Darling Basin
- Regional development planning
- Utility sustainability plan
- Asian power station

Achieving contextually clever design of projects

CHAPTERS 7, 8

Key ideas and insights

- Infrastructure projects sit within wider system that convey risks and opportunities
- Smart solutions routinely sit 'outside the box' of conventional thinking and arbitrary project boundaries
- Collaboration enables essential sharing of insight, effort, resources, authority and risk
- Simple tools can cut through the complexity of real-world projects to expose amazing solutions

Tools and frameworks

- Systems mapping
- Issues wheel
- The IDEA fish

Project case studies

- Electricity substation
- Iron ore export port
- West African mining project
- Indonesian power plant
- UK aged care facilities
- Power transmission lines

Securing the shift in design practice to deliver results

CHAPTERS 9, 10

Key ideas and insights

- A vision of a project worth building can be inspiring
- Tangible targets matter for critical issues and goals (and must be ambitious)
- Breakthroughs and clever designs require persistence to keep asking "how" the vision can be delivered
- Matching resources and leadership to the task will enable focus of effort and achievement of results

Tools and frameworks

- Policy-practice gap
- Risk-materiality matrix
- Business sustainability and maturity model

Project case studies

- Iron ore export port
- Urban rail project
- Onshore gas development
- Utility sustainability plan

Cultivating the capability to keep delivering

CHAPTERS 11, 12, 13

Key ideas and insights

- Effective leaders of transformative design are accomplished business leaders, integrators and intrapreneurs
- Communication skills are more important than technical skills
- Match the tools and process to the task, rather than using existing tools just because they exist
- Use reporting to celebrate success and drive decisions that improve projects and associated businesses

Tools and frameworks

- Reporting systems design framework
- Communicating for impact rules

Project case studies

- Utility sustainability plan
- Infrastructure investment scorecard
- Regional aerodrome
- Defence bases and training areas