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Introduction
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1.1 Opening Remarks

Things do go wrong on construction projects – surprisingly often and for a range of remarkably similar reasons! These failures are not confined to one country or region or culture. They happen across all continents, and have done so for many years.

So what are these failings? Could they be related to construction being an industry that has always been notorious for operating on a high risk/low margin model? Might a relevant factor be the onerous payment and contractual terms that are often imposed on head contractors and on consultants by clients, or by head contractors on their sub-contractors and suppliers? Are companies bidding too aggressively and too often for work on the basis that this project is a ‘must win’ – either for the (short-term) prestige of tender success, or the necessity to win new work just to cover failings elsewhere in their business? Are individuals over-optimistic regarding outcomes and not evaluating the risks associated with time and cost in a robust, realistic, and pragmatic way?

Each new generation inevitably finds itself repeating the same old questions of ‘why’ the industry continues to be like this, and then ‘how’ and ‘what’ can we do to improve it for the future.

This book seeks to identify and understand the key structural ‘why’ questions related to the construction industry at this time, and then to make constructive arguments as to ‘how’ we can improve in the future, with emphasis on ‘what’ specific actions and focus could produce a long-term improvement in the industry’s general health.

From the experience of the authors and their analyses of failures, four overarching themes emerge on a consistent basis:

1) People and teamwork. We all know that building a house or a wall needs to be done on sound foundations. The critical foundation theme is people and getting the team and its organisation right. This starts with commitment from people with the right behaviours and values working in committed, focused teams.

2) The right framework (business models and form and terms of contracts). Getting the right contractual environment is essential to allow competent people and teams to deliver successful project outcomes.

3) Management of risk. Managing risk is not only the responsibility of risk managers; it is everyone’s job. Managing risk must be at the centre of each project and the process of
identifying, eliminating, and managing it must be a core management tool and value, not a bolt-on. Client and project sponsors need to consider the concept of who owns the risk and who is best placed to eliminate it and if that’s not possible, how should it be managed to reduce its probability of occurring and its severity. Why is risk management no higher up the ‘framework’? The simple answer to that is that it is equal, but without having the right people and contract arrangements in place the successful management of risk will not happen despite having the best risk management system in the world in place.

4) Robust processes (corporate and project management). Flowing from the contract and how it is set up are the robust processes that are essential to enable the project to be executed successfully. History shows that many projects fail at this hurdle.

The book is split into six sections. Section A sets the scene with an overview of the state of the industry. Sections B, C, D, and E cover the solutions we put forward. Finally, Section F summarises emerging conclusions. Each section is described in detail below.

1.2 Section A – The State of the Industry (Chapters 2–6)

This section of the book sets the scene with an overview of the current global state of our industry today. Chapter 2 takes a global overview from the start of the millennium. It looks at world cycles, industry and regional trends, and the good and bad news and their consequences. Following this in Chapter 3, Judy Adams, Director of Turner & Townsend, provides a really interesting overview of the issues faced by construction consultants in the international marketplace. Chapter 4 looks at the common causes of project failure and puts forward 35 common failure causes. In Chapter 5, Professor Rudi Klein addresses the issues of the use and abuse of construction supply chains and puts forward that the links for failure and success lay between communications, cash, people, and the product. Chapter 6 concludes this section by focusing on the UK construction crisis and the viability of tier-one contractors and supply chains, and shares lessons learned for improving the risk profile of infrastructure. At the end of this section the reader will be armed with an understanding of what the problems are that we face and will be equipped with a sound understanding of the issues that businesses currently face.

1.3 Section B – People and Teamwork (Chapters 7–11)

This section addresses the fundamental foundation block – people and how they are organised (teams and teamwork). These chapters provide solutions that address the foundation issues above all, which are all about people, their behaviours, values, and the organisational structures that they work in. In Chapter 7, we look at personal characteristics and corporate practices that can be obstacles to senior management and Board success. Chapter 8 focuses on structuring successful projects, with emphasis on the human element and effective teams. In Chapter 9, David Somerset, a respected dispute resolver, focuses on the criticality of understanding and managing difficult relations to
achieve a successful win–win outcome. Tony Llewellyn in Chapter 10 puts forward that social intelligence is essential for project success. Finally, Chapter 11 brings this section of the book to a close, pulls all the strands together and focuses firmly on the human factors – getting the right people into the team. Without doubt, at the end of this section you will have grasped that it is people, people, people, and their behaviours and values, working in appropriate structures that set the right environment for success.

1.4 Section C – The Right Framework – Forms of Contract, Business Models, and Public Private Partnerships (Chapters 12–15)

Getting the right contractual environment is essential to allow competent people and teams to deliver successful project outcomes. This section looks at business models, the form and terms of contracts, and the need to create the right supply chain and commercial environment to allow competent people and effective teams, outlined in Section B, to work successfully – setting the rules and boundaries! In Chapter 12, Rob Horne, a ‘seasoned’ construction lawyer puts forward, with examples, that getting the contract right is a fundamental risk management tool. In Chapter 13, Richard Bayfield then discusses the New Engineering Contract (NEC) interface with early warning systems (EWSs) and collaboration. Chapter 14 puts forward Jon Lyle’s personal international experience with development contracting. This section concludes with Chapter 15, which provides a general overview of Public Private Partnerships (PPPs) and makes recommendations for improvements to PPP contracts.

1.5 Section D – Management of Risk (Chapters 16–23)

Dr Robert Gaitskell QC opens this Section with Chapter 16 looking, not surprisingly, at human factors. Chapter 17 outlines effective risk management processes and John McArthur in Chapter 18 takes us though the relationship of success with risk management in North America. In Chapter 19 Edward Moore and Tony Llewellyn explain how an EWS provides the project community with simple but powerful early warning signals, which should be a standard part of all project management.

In Chapter 20, Rob Horne looks at advances in technology that aid in the management of construction risk. Graham Thomson in Chapter 21 focuses on intelligent document innovations that capture data and aid the processes of risk management and compliance. Professor Noha Saleeb in Chapter 22 looks at building information modelling (BIM) and highlights the organisational requirements that are needed for the successful implementation of BIM. Finally, in Chapter 23, Ian Williams and Stephen Warburton give an overview of specific projects where effective risk management has led to project success. The chapter also puts forward the lessons learnt from these projects, followed by a summary from Charles O’Neil on the importance of clear project ownership and leadership by senior management.
1.6 Section E – Robust Processes – Corporate and Project Management (Chapters 24–27)

Flowing from business models and the contract and how it is set up, the next key theme that needs to be addressed is the robust processes that are essential to enable the project to be executed successfully. Chapter 24 starts with addressing a fundamental project failure topic – time, i.e. failure to meet the schedule and the implications. Excellent advice is given to avoid the pitfalls that many have fallen into.

Notwithstanding having the right people, contract, and processes in place it is essential to have ‘checks and balances’ in place. It is healthy in a project to have challenging and open dialogue; nevertheless differences in opinion develop and can lead to disputes. In well thought out contracts a process on how to resolve disputes will exist. Chapter 25 looks at managing and resolving conflict and explains the real benefits and the success rate of mediation. Chapter 26 outlines essential areas of contract administration in respect of resolving disputes, in particular the benefits and risks of alternative dispute resolution methods. The final chapter in this section, Chapter 27, looks at the benefits of peer reviews and independent auditing. This is a very pertinent area that is being investigated in the wake of the Carillion corporate failure.

1.7 Section F – Emerging Conclusions (Chapter 28)

All the authors agree there is no ‘magic formula’ for the shift from ‘business as usual’ to achieving world class and successful project outcomes. Chapter 28 brings together the common findings and conclusions, puts forward recommendations, and challenges the reader to be bold in implementing change that will bring real efficiency, deliver world class projects and improve project and corporate profitability.

1.8 Final Note

Improvement in performance is never attained by ‘business as usual’. If you undertake today’s project in the same way you did yesterday, then tomorrow you will find yourself with yesterday’s outcome!

The contributors are convinced that you will be better equipped to deal with tomorrow’s projects if you consider and adopt some of the good practice ideas presented in this book. The extent of your success depends significantly upon whether you make the real commitment to learn, adapt, and change, and in just how far you are prepared to challenge ‘old habits’.

Tomorrow’s outcomes are in the hands of all the many skilled professionals and leaders within our industry. Doing nothing is not really an option – good luck!