Preface

In an industry that is dominated by one-of-a-kind projects involving competence sharing between different organisational entities, and thin profit margins, a key challenge in the new global economy is to ensure delivery of projects that are on time, within the cost limits, of high levels of quality, sustainable, and provide value to the customer. All this, while ensuring that contractors remain profitable without raising project costs. This calls for systemic innovation in the management of construction projects and processes that takes into consideration all relevant aspects and stakeholders of the complete product and service lifecycle [1, 2 and 3].

The Project Management Body of Knowledge (PMBOK) [4] provides one perspective to the effective management of projects and processes. Understanding the unique characteristics of the construction industry, a special construction extension to the PMBOK was released [5]. It is primarily based on a set of guidelines for different functional areas for the management of processes within projects. Concerns have however been raised about its completeness and applicability\(^1\). In fact, Koskela and Howell [6] challenged the validity of the underlying theory of project management. If not more, this at least presents the impetus to explore project management from a different set of perspectives. As an example, one could consider management of processes and projects from the perspective of information flows and contract networks (figure 1) within inter-enterprise project environments such as construction [7]. This simple illustration is an indicator of some of the underlying problems in the management of processes and projects within the construction sector.

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The challenge of systemic innovation in the management of construction projects and processes has been taken up in this book. Contributions and experiences from Australia, Brazil, China, Croatia, Finland, Norway, Saudi Arabia, Sweden, Taiwan, The Netherlands, United Kingdom, and USA unveil how systemic innovation is being used to manage projects, product processes and control, productivity and performance improvement, product delivery systems and contractual practices, and risk management.

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