Book Review

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Building Information Modeling, by Karen M Kensek, is a guide for architects, engineers and construction professionals on the basics of BIM, describing diverse factors that need to be considered for its practical adoption in design and construction. BIM has the potential to revolutionise the way design and construction processes are delivered, helping to resolve long-standing issues of poor communication, poor information management and coordination, which have led to much waste and loss of value across construction projects. However, the implementation of BIM-based processes and technology is challenging, and this book highlights some of the practical issues currently faced by companies, as well as strategies needed to overcome these.

The book is pocket sized and intended to provide a succinct volume that collates easy to use, need-to-know technical information about BIM. The book also intends to ‘address many key roles that BIM is playing in shaping professional offices and project delivery processes (p.2)’, and it does describe some of the main changes occurring as a result of BIM.

The book is divided into two parts, each subdivided into diverse chapters. Part 1 presents main definitions, explores issues and describes BIM-related opportunities for the industry. It incorporates a description of a number of important areas that need to be considered for BIM implementation, including stakeholders roles and responsibilities, technical issues related to data exchange, interoperability and multidisciplinary coordination, some legal considerations, as well as the extremely important need for standards both within and across firms to enable appropriate collaborative BIM processes. The session also mentions BIM applications across the different stages of the design and construction, from conceptual design up to facilities management.

Part 2 presents examples of cases of BIM adoption from design and construction firms which are written by people involved in those projects. The case study examples illustrate some of the benefits as well as problems companies face in adopting BIM. Although the descriptions are quite short, all cases highlight some successes as well as opportunities for improvement, which is of benefit to readers. The project case studies presented are informative practical examples which address, for instance, the need for shared standards across project teams, the need for the definition of information content and level of detail for model deliverables, responsibilities for model reviews during upstream (design) and downstream processes (construction and/or facilities management), need for product libraries, between others.

Kensek chooses her two-part structure in order to better communicate the diversity of information needs for industry, from theory to practice. Part of the problems that the industry has faced to date in adopting BIM tends to be related to misunderstandings of the need to change working practices and processes, or, in some instances, excessive focus on technology alone as opposed to process changes. Therefore, the clear concepts presented and discussed can be seen as an important information source. References to other existing bibliography are used to balance the brevity of some areas, which is beneficial for readers. Because of its general purpose, it is likely that those less experienced in BIM implementation will benefit more from the book contents than experienced professionals.
Overall, the book is effective in supporting stakeholders to grasp a better understanding of multidisciplinary BIM processes and technology in the current industry context, with a welcomed emphasis on collaboration, sharing of data, changing roles and responsibilities, and the need for sharing risks and rewards. A number of books have already addressed both theory and practical BIM examples; however, this book presents an overview of BIM through a welcomed clear and easy to understand language.