The Business Value of BIM

Elaborating on Content and Perspective

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Academic Dissertation which, with due permission of the KTH Royal Institute of Technology, is submitted for public defence for the Degree of Doctor of Philosophy on Friday the 17th November 2017, at 1:00 p.m. in F3, Lindstedtsvägen 26, Stockholm.
Abstract

The expectations on digitalization and Building Information Modeling (BIM) in the Architectural, Engineering and Construction (AEC) are high. The high expectations are reflected in an increasing interest for the term business value of BIM. However, the practical and theoretical understanding of its content and perspective is characterized by rationalism and positivism commercially promoted by industry. This thesis aims to reflect on, problematize and extend the theoretical understanding of the content and perspective of the business value of BIM. Perceptions about business value of BIM, the associated challenges and costs and the role of the business of BIM in a wider socio-technical context are examined among Swedish and international AEC industry actors and a large Swedish public infrastructure client. To extend the understanding of the content and perspective of the business value of BIM, the rational and process-oriented theories on the business value of IT are combined with the more interpretive and hermeneutic socio-technical systems theory. A social and cognitive dimension is thus added to the understanding of the business value of BIM and business value of IT. By combining the two research fields and contributing with the socio-technical perspective to the theoretical understanding of business value, this thesis contributes with theory development of the understanding of business value BIM and business value of IT. For practitioners, the thesis shows the complex, multi-dimensional and challenging aspects of implementing BIM for business value. The journey of perspectives in this thesis from positivism towards increased interpretivism also sheds light on the implications of when different perspectives exert influence on a research field (hegemony) and wishes to provide a contrast and balance to the rational and positivistic perspectives in BIM research. It also wishes to inspire future BIM research to broaden the theoretical perspectives.

Key Words
Business value, Building Information Modelling, socio-technical