

ABSTRACT

Sapp, K. Transition from 2D design to 3D modelling – the example of KMT Prefab OÜ. The thesis consists of 51 pages, 16 figures, 13 tables, 48 references and 1 appendix. The paper has been written in Estonian. The master's thesis was composed in Tartu 2017.

The main aim of this Master's thesis is to analyse the transition from 2D design to 3D modelling with an example of a particular company – KMT Prefab OÜ. Company aims to be one of the main thermal and wooden construction solutions' provider in The Scandinavian market and this is the reason why the company is considering transferring to BIM.

The method of research is collecting information through analysing theoretical literature, including different documents and books. Additionally, the net present worth was calculated and analysed. The result of this research is going to examine the advantages and disadvantages of the transitioning from 2D modelling to 3D modelling. This thesis will map the areas needing improvement and propose an action plan to advance the transition.

The first part of this thesis shows risks and benefits of transferring to BIM. Additionally, the general level of BIM in Estonia was analysed at the request of the company. The second paragraph discusses the quality management system of KMT Prefab OÜ and shows that no substantial changes will be made. The third and final chapter discusses whether it is worth to transfer to 3D modelling by calculating transition profitability with net present value method.

Keywords: BIM, quality management system, transition profitability, net present value analysis, load bearing element design and production