



Projektstudium:

3D Printing in construction - quo vadis?

Which use cases will be most promising for 3D Printing in construction in the future?

Develop a path to the future for a building material producer

About Knauf

Knauf is a multinational, family-owned manufacturer of building materials. The headquarter is located in Iphofen, Germany but also maintains a Digital Hub driving digitalization efforts based in Munich. Knauf generates over 10 billion Euro in sales from manufacturing construction materials for drywall construction, plasterboard, cement boards, mineral fibre acoustic boards, dry mortars with gypsum for internal plaster and cement-based external plaster and insulating materials but also glass wool, stone wool and other insulation materials. Its 35,000 employees work in over 86 countries around the world.

Your task

- Help Knauf understand the direction of applications in 3D printed houses by providing an overview of the status quo and likely development in terms of applications and regions
- 3D printed houses are on the rise, we see multi-storage buildings, bridges, shelters, towers and more
- Based on different techniques, providers and materials different use cases seem feasible. However, not everything that is possible is desirable or economically viable
- Different local requirements and starting points might also have an input in terms of adaption
- Provide an overview of the status quo & current projects, create criteria that spur/hinder adoption assess, develop an outlook (also based on 3D printing method) and derive implications for a building material manufacturer (Knauf) and its building machinery provider (Knauf PFT)

Your profile

- You should be a team of 2 to 5 students in your Bachelor or Master studies
- You should be ready to start this project study in Winter Term 2020/2021
- You should have solid German and English skills as well as analytical knowledge
- You are pragmatic, motivated and passionate

Your benefits

- Work closely together with Digital experts at Knauf's Digital Hub, driving digital projects throughout the organization globally
- Get first-hand experience to understand how manufacturing firms implement digitalization initiatives
- Work independently in a project-based setting with continuous support by Knauf experts
- Gain a head-start at beginning your career at Knauf

Your application

Please direct your team's application (including a joint cover letter, CVs, transcripts and relevant references) to Andreas Kronthaler, your point of contact at Knauf, and Marc Mehrer at the Chair of Management Accounting. Feel free to reach out in case of any questions. We are looking forward to your application.

- Andreas Kronthaler (kronthaler.andreas@knauf.de)
- Marc Mehrer (marc.mehrer@tum.de)