

CONSTRUCTION ENGINEERING MASTERS DISSERTATION ABSTRACT

The horse, the jockey and the trainer: What makes a successful ConTech venture?

Dissemination of technology drives productivity gains through increased levels of automation. Regrettably, the construction sector has one of the lowest levels of technology adoption. This study examines venture capital-backed startups as effective disseminators of technology in the construction sector, attempting to link differences in venture compositions to variance in venture outcomes. A quantitative analysis is conducted on 181 ConTech startups, of which 39 are considered successes in the context of the study. The relative importance of business, founder, and investor factors to success are identified by training a random forest classifier. The results indicate that specific patterns can be tied to success in commercial scaling of construction technology. The location of the founding team, addressed construction workflow, entrepreneurial experience of founders, and industry-specialization of established investors are identified as the most important variables. Specific aspects of human and social capital are found to be more effective on the founding team than the investor side, and vice versa. An important contribution of this research is the extension of prior venture capital work to a construction-specific context. Additionally, the findings offer insight into the current feasibility of implementing various construction technologies in a scalable manner. Practical implications to startup founders, venture capitalists, and the broader society are discussed.

Key words: *contech, construction technology, venture capital*

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