

Master-Thesis Engineering, Business Engineering Developing digitally enabled service systems from VP to MVO in an Industry context



Problem statement

The shifting paradigm of the construction industry due to increasing digitalisation and industrialisation presents opportunities for digitally enabled service systems. However, the pace of change and evolving customer expectations necessitate continuous innovation.

Context-specific development processes become crucial for organisations to develop effective and innovative solutions to maintain competitiveness and ensure longevity. Yet, creating digital solutions that meet customer expectations remains a significant challenge. This study addresses the need for a localised development process specifically designed to develop innovative and customer-centric solutions within the changing landscape of the construction industry.

Methodology

The study utilises an entrepreneurial Lean Startup approach. The approach was enriched by an action research strategy to provide valuable practitioner perspective insights. This methodology facilitates an iterative, reflective cycle.

Findings

This research outlines an agile, customercentric development process inspired by Gassmann et al.'s (2014) framework. It provides an efficient method for creating, validating, and aligning value propositions with rapid market changes and involves key ecosystem stakeholders. The process, informed by practitioner insights and validated through literature, progresses from initial management initiation to final solution piloting, ensuring viability and alignment with the organisation's strategy and capabilities. Essential tools like ecosystem mapping and value proposition design are utilised, leading to a validated offer aligned with the company's capabilities, thus assuring solution feasibility and securing management approval for development and pilot stages.

Gabriel Tiefenthaler

Advisor: Prof. Dr. Shaun West Expert: Dr. Christopher Ganz

Cooperation Partner: Hilti Group



