Rethinking the Business Model in Construction by the Use of Off-Site System Deliverance: Case of the Shaft Project - DTU Orbit (28/01/2019)

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This paper presents a set of insights to be used in the development of business models for off-site system deliveries contributing to the development of Off-Site Manufacturing practices (OSM). The theoretical offset for discussing the development of business models is the blue ocean strategy literature combined with theories on mass-customization and platform development identifying the optimization of cost and value through the handling of complexity as the central process. This framework is developed in order to analyze a specific case on system deliverances – the prefabrication of installation shafts. Findings from the development and production of the installation shaft show that system deliveries represent a promising strategy for moving from red ocean competitive environment with the predominant cost+ business model, to a blue ocean situation in which the competition emerges in the constant pursuit of value creation and cost reduction. On the basis of that system deliverances represent a promising strategy in the future development and application of off-site manufacturing practices. The application of system deliveries is however demanding as it represents a fundamental shift in the existing design and production practices. More specifically the development of system deliveries requires: (1) an explicit market focus, enabling the achievement of economy of scale, (2) a coordinated and coherent development around the system deliverance focusing on its internal and external modularity, (3) development of processes and configuration practices which make it possible to put together (configure) the product matching the needs of the individual building project. (4) development of alliances between companies in enabling value chain integration.

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