# Project Management capabilities for a Disruptive Future

## John L. Heintz

# Abstract

In the coming 10 years we can look forward to radical changes in the construction industry. In response to these changes project managers will have to acquire and enhance a whole range of skills that have until recently played little role in the conception of what it is to be a project manager. The chief of these skills will be to be able to apply design thinking to creation of project organizations and to finding solutions for adapting to disruptive change both in the industry as a whole and during the course of individual projects.

The changes in the industry include both rapidly increasing numbers and levels of performance expectations of both project organizations and the buildings they deliver, and disruptive change in the way in which buildings will be procured, designed and produced. Digitization will not only, finally, revolutionise the flow in information throughout the procurement phase, but also throughout the whole lifecycle extending out into the social and urban context thorough the use of lifecycle modelling and big data. The requirements for sustainability, including energy neutrality and the implementation of the circular economy, as well as increased expectations of safety, climate control, and operational efficiency will require the participation of a whole range of new consultants and the balancing of design decisions across an increasing range of performance criteria. Added to this the emergence the circular economy, and the disruptive power of new players in the industry exploiting the potential of digital platforms and attracting massive capital investment will so radically alter the supply chain as to fundamentally change the building procurement process.

This will not happen overnight. There will be an extended period where we will be struggling to develop the new methods of organizing projects, the new tools required to simulate, plan, and monitor them, and the ability to embrace the rapid changes in the industry and in individual projects. Project managers will need to become designers of projects (the process not the product) and experts in change management. They will need to be able to choose from an increasing variety of contract forms, but also be able to adapt these forms to new business and procurement methods including circular procurement / circular economy and life-long BIM models (The use of digital models as contractual documents), blockchain. And they will need to become much more capable of dealing with uncertainty and change – dealing does not mean controlling, but coping, i.e. acknowledging the uncertainty and change rather than attempting to eliminate them, and working (flexibly) with them.