

Argument Mapping Analysis of Leagile Strategy in Construction Management Research

Fangyuan Shen^{1,*}, Dr. Ian Stewart²

^{1,2} Management of projects, Department of Mechanical, Aerospace and Civil Engineering, The University of Manchester, UK, M13 9PL.

Abstract.

Leagile strategy was established in manufacturing sector in 1990s and has been argued in some research to be beneficial for application to construction environments, leading to less waste in construction processes as well as flexibility in meeting customer requirements. Adoption of an innovative strategy is risky and may add more complexity to construction projects. This paper uses argument mapping analysis based on Toulmin (1958) model of argument to examine the degree of convincing of the proposed benefits of leagile strategy in construction by extracting the logic of arguments made in the related articles. Articles that analysed benefits of using leagile strategy in construction were downloaded from Scopus and the related arguments were mapped to the adapted argument model. Analysis shows that leagile strategy has been argued to offer new possibilities to offsite construction and supply chain management in construction projects. However, argument mapping results demonstrated that the argument on benefits of using leagile strategy in construction is weak in the level of convincing to readers because of less empirical evidence and lack of sufficient theoretical understandings and operational explanations. This paper critically analyses the logic of arguing in leagile studies and theoretically, the method can serve as an example to be applied to other areas in management research as well.

Keywords: agile manufacturing, agile methods, construction management, lean, leagile.