

Agile Software Development Process: A Case Of Collaborative Cognition In Flux

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Abstract: What role do physical artifacts play in decreasing the flux of an individual's and a group's representation during collaboration? This question was addressed in the case of Agile software development, which emphasizes collaboration. Evidence suggests that the keys to success in Agile are two physical artifacts: the "story card" and the "wall." These artifacts are particularly useful when supported by appropriate social interactions. Thus, we conducted an ethnography study of an Agile team and used situated cognition to study their communication process. We found that members perform a categorization process both at the perceptual and conceptual level, which is akin to structural coupling. The physical artifacts play a mediation role to help members form and sustain the structural coupling process, both together as well as individually. This, in turn, helped them to sustain common ground and decrease the flux of the individual's and group's representation of system design.