

Strategic Technology and Innovation Management Programme 2018

Agile Project management in Not-Purely-Software development projects

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This project is an introductory study of the use of Agile project management methods in product development projects involving hardware as well as software.

Aims

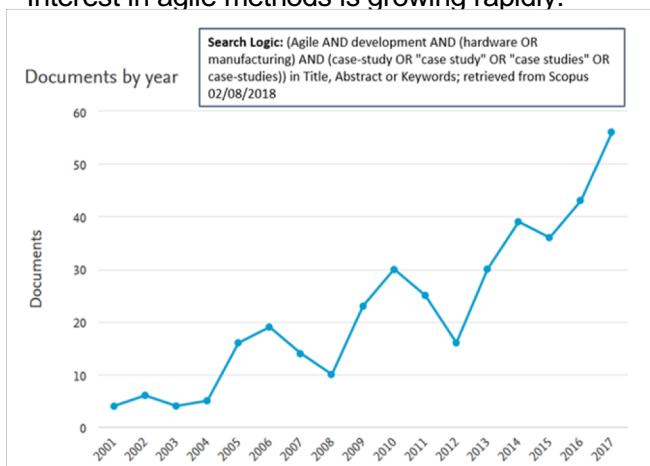
After a thorough literature review the study concentrated on the process of moving to agile methods: "How and where can large manufacturing companies become Agile in new product development of not-purely-software projects and why are they striving to do so?"

Progress

The work was mostly done by an ISMM student, Marian Pho Duc. It consisted of a thorough literature review, 22 interviews and questionnaire with 34 respondents in 7 companies.

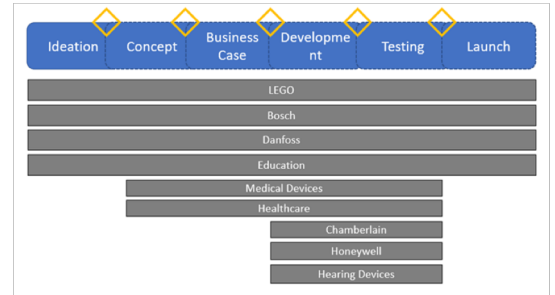
Agile project management is characterised by an iterative and adaptive approach using small cross-functional teams empowered not only to organise their own work but to adjust aims. Close customer feedback is essential. The "customer" may be a member of the company. This contrasts with the traditional approach where the spec and work plan is laid out in advance.

Interest in agile methods is growing rapidly:

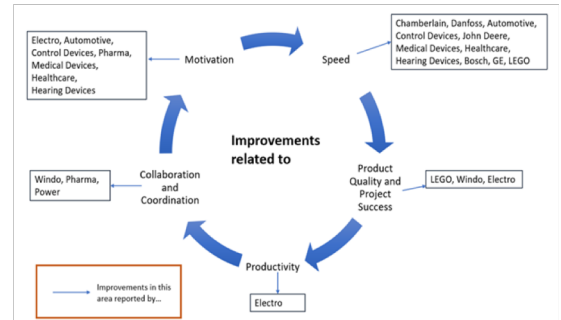


However, few completed projects have been reported in the literature. Most operate within a Stage-gate process but the gates are used not to check that deliverables meet a given spec. but rather the level of satisfaction with them.

Surprisingly, use of agile methods was not found to be concentrated in the early stages where uncertainty is highest



Benefits reported are up to 50% increased speed of delivery, improved motivation of staff and higher customer satisfaction.



Moving to agile methods often requires a significant cultural change, especially among managers. One study reported tension between agile teams and other parts of the company in 70% of projects.

Disadvantages may include poor transfer of knowledge between teams but it is early to say. Further work is required.

Deliverables

A digest of the report will be available to STIM members. A continuation project is proposed for next year. Inputs are welcome.