

2020 Strategic Technology & Innovation Management Programme

Agile NPD in non-purely software projects

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Industrial / managerial need addressed

Several STIM Companies are using Agile methods within their Innovation Processes. A STIM project undertaken in 2018 studied the difficulties and challenges in introducing the new methods required. Results from this project, together with information gathered at the STIM2020 launch day, indicates that although benefits from using Agile can be seen in software only projects, many managers are yet to discover if the benefits can be applied throughout Product Development. Fixed development timelines for components other than software, (e.g. hardware / machinery / pharma compound formulations) and factors such as reporting requirements to both internal and external stakeholders, are examples of obstacles faced by managers when implementing Agile processes.

This project follows on from the 2018 study with particular focus on issues of Governance and control. The main themes of the 2020 study are:

1. Review of the rapidly-developing academic literature.
2. Agile practice; advantages and disadvantages.
3. Voices of significance; e.g. customer representative, company management, engineering requirement.
4. Governance and reviews, including post-project reviews and stage gates.
5. Assessment of the benefits and how best to judge in advance which projects or sub-projects are most suited to an agile approach.

Expected deliverables

Report and feedback from STIM network engagements.

Engagement opportunities

Input from STIM and other companies will be welcome throughout the project and particularly at STIM networking days. We will look for opportunities to visit and interview STIM companies with experience of implementing Agile projects or those wishing to implement Agile. We are especially keen to involve companies that took part in the previous project.

Approach

Background work into STIM company experience will be undertaken between January and May. The main body of the work will then be undertaken between May and August by an ISSM student. This will take the form of a Literature survey followed by interviews with STIM members, and others as case studies. Review of findings and request for feedback from STIM companies will occur between September and November.