Agile Project Management in Hardware Development

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Industrial / managerial need addressed

Agile project management techniques such as Scrum are widely used in software development but seldom in projects involving hardware, where the traditional "waterfall" approach predominates. There are good reasons for this, among them the difficulty of sharing or re-assigning tasks in projects that involve several separate specialisms. But agile methods do generate high levels of energy and commitment in the team and their emphasis on speed rather than precise adherence to a fixed specification may often be appropriate. In general hardware projects may well benefit from a mix of project management approaches. This exploratory project will aim to illuminate what benefits might accrue from mixed approaches and how managers can decide which approach to use for different parts of a given project.
We hope to engage an ISMM masters student to work on this.

Expected deliverables

Guidance notes on how to determine where agile methods may be advantageous in a particular development project and how to manage the combination of them with traditional approaches.
Examples of successful (and unsuccessful) experiences and estimates of the possible benefits.

Engagement opportunities
Several STIM companies have had experience of these issues. We intend to collate and discuss this as well as to survey the (rather scanty) literature on the subject.
This is an exploratory project so we will need to gather the experience and interests of STIM members through interviews and case studies.

Approach

Literature survey followed by interviews with STIM members, and others as case studies.