Agile Outsourcing

Abstract:

The idea of this article is to throw light on integrated terminology of two words Agile and Outsourcing in the context of rapidly changing technology landscape and need for resource augmentation in certain conditions. The techniques and processes need not be reinvented but can be seem hitherto in manufacturing and automotive sectors who have been through this maturity curve of collaborative outsourced work with great degree of mathematical precision.

Let's recap these two terms Agile Methodology and Outsourcing briefly for those who are not yet fully familiar with these terms.

In this article outsourcing is referred to as subcontractor or supplier or vendor as well.

Agile Methodology:

The method is to plan and deliver implementation in short cycles called SPRINTS. Quite meaningful when massive plans with multiple baselines leads to errors and overheads. Scrum Alliance, the body that proposed this agile methodology considers embracing the 4 following factors.

1. Focus on individuals and interactions rather than relying only on tools and processes to do the job.

2. No excuse to delay the functional software waiting for the exhaustive documentation

3. Collaborate with customer to succeed and follow the contract to cover the risk

4. Anticipate change requests than following a meticulous plan.

Other aspects include,

- Artifacts include product backlog, sprint backlog, product release plan and Sprint plan.

- Activities include, daily scrum, sprint inspection and review, product shipment.

- Main Roles are Product Owner, Scrum Master and Self Sustaining Autonomous Teams.

Automotive/Manufacturing Outsourcing:

The knowledge of subcontracting has evolved over a period of years to vendor development and to collaborative outsourcing. Some of the key factors for outsourcing are costs, resource availability, technology leverage, opportunity to scale and regional presence for political reasons. It comes with associated key challenges that include, assembly quality, supply chain complexity, and compliance issues.

In the 1990's, GM, Ford and Damien Chrysler introduced QS-9000 standard beyond what was there in ISO standard. But Toyota went further in supplier collaboration with 5S, design and quality techniques, Kanban (JIT) and created a strong outsourcing eco system that is worth emulating.

Before we jump in outsourcing in software and technology areas, let's peep into the rigor and mathematical discipline that went into automotive outsourcing processes.

Just to name a few they have deployed design of experiments, statistical process control, measurement systems analysis, failure mode and effects analysis, vendor development framework, supplier audits, QMS, and TQM

Automotive companies managed to grow outsourcing model by following few principles.

- Shared design reviews for expected performances

- Mutual understanding of shared benefits of continuous improvement

- Contractual agreement on penalties and loss apportioning wherever applicable that was agreed in supplier contracts.

The following diagram, briefly illustrates how some of the Automotive OEM's viewed their outsourcing strategy.
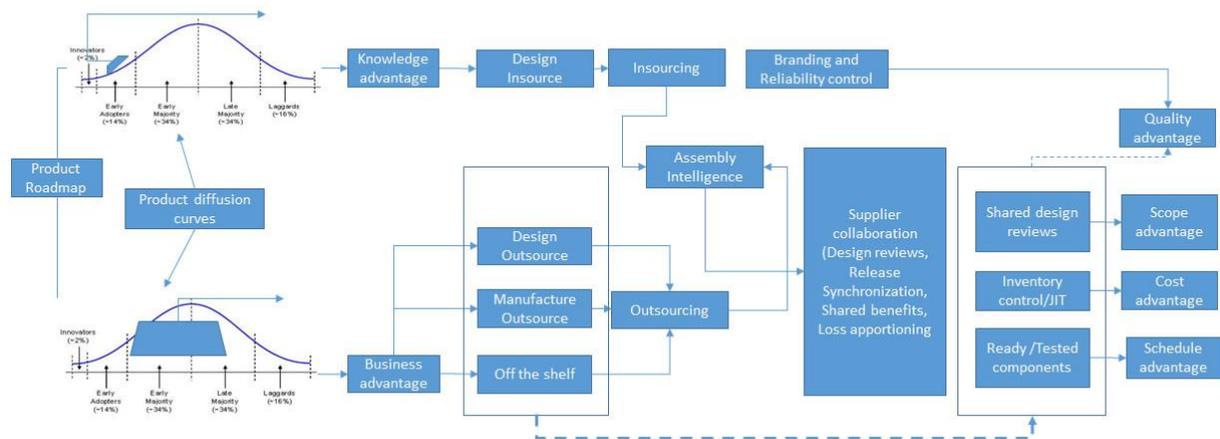
Agile Outsourcing:

Subcontracting has 4 major processes, Sourcing, Acquisition, Administration and Closing in addition to numerous sub processes. Agile methodology seeks simplification without losing its intent.

Outsourcing collaboration does not dilute the need for having an appropriate contract model pillared by the following four key elements.

1. Cost management, influenced by budget considerations

2. Scope management, influenced by change requests

3. Delivery strategy, influenced by product requirements

4.   Quality, influenced by insource design competence and collaborative Outsourcing.

Several contract models exist like

- Fixed scope and fixed price,

- Time and resource with variable scope,

- Time and resource with cost ceiling, Incentives, etc.

The best way for an agile project outsourcing is suggested to be the Time & Resource for a variable scope which is followed by periodic reviews, piecewise funding with a cost ceiling for each period. The following diagram represents the above

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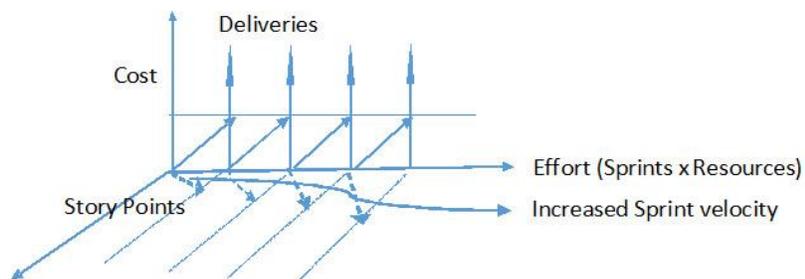
Conclusion:

In the near future, companies will be challenged in outsourcing strategies and also to survive the changing technology landscape.

The key challenges for the agile framework and integrating outsourcing strategy are

-       To find experienced scrum masters to facilitate smooth and efficient transition

-       To develop autonomous teams to go through frequent deep learning curves.

-       To redefine and reskill product ownership and its owners.

-       To build stakeholder conviction including management, for reorganization.

-       To evolve a new culture based on trust, mutual respect and sustained teams.

-       To gain competence in outsourcing policy formulation and collaborative steps.