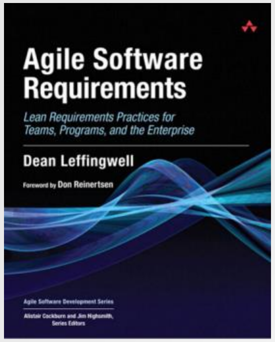

Agile Software Requirements

Lean Requirements Practices for Teams, Programs, and the Enterprise

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Chapter 22:

Moving to Agile Portfolio Management

Portfolio Management

Portfolio management is a top-level authority that makes long-term investment decisions on strategic areas that affect the business performance of the company.

In order to do this properly, deep knowledge of the **market**, **environment**, **technology** and **financial** landscape at a macro level are needed.

This responsibility requires high level rank and rests with a vice president , executive team or business unit top management level.

Three sets of activities that are important

1. **Investment funding:** Determining the allocation of the company's scarce R&D resources to various products and services.

2. **Change management:** Fact patterns change over time, and the business must react with new plans, budgets, and expectations.

3. **Governance and oversight:** Assuring that the programs remain on track and that they follow the applicable corporate rules, guidelines, and relevant standards. This function is often under the auspices of the project management office (PMO).

When Agile Teams meet The PMO: TWO ships Pass in The night

Sometimes the ceiling is represented by the project management office (PMO), a place many agilist perceive to be “the mother ship of impediments.”

Ultimately, there comes a time when these two ships must meet and agree on a common course and direction.

Legacy mind-sets in Portfolio management (1)

Widget engineering: This mind-set is based on the belief that software development is a repetitive, readily controlled, and manufacturing-like business, rather than research *and* development with the incredible variability, risk, and opportunity that such implies.

Order-taker mentality: Also known as “You build what we tell you to build.” Founded on the belief that *they*—the customer (or portfolio or program or product manager or business owner;

Maximize utilization: The belief that if all resources aren’t fully utilized *on paper*, then they won’t be fully utilized *in practice*. “Unless we keep them fully loaded, they’ll just be idlers,” goes the thinking.

Legacy mind-sets in Portfolio management (2)

Control through milestones: The belief that by asking for the right kind of data at project milestones earned value metrics, design reviews, requirements, and test plans—we can tell where we are on the project.

We can plan a full year of projects: Conveniently disregarding our past 20 years or so of experience in *failing* to predict projects a year in advance, we assume it's a failure of *our planning*, not a failure of the basic *paradigm*.

Just get it done: The belief that our best case plans can be reality if the teams would only *try hard enough*.

Widget engineering

- Manifestation
  - Fixed schedule, fixed requirements.
  - Big, up-front design (BUFD).
  - No allowance for innovation.
  - Unrealistic expectations.
- Problems
  - Detailed commitments made a year in advance. Analysis paralysis.
  - Project is late when it’s started.
  - Detailed specs and designs “handed off” to development.

Order-taker mentality

- Manifestation
  - Do what you are told.
  - We are the boss of you.

- Problems
  - False agreements. No buy-in.
  - Misses innovation from development.
  - Failure to meet expectations—mistrust.
  - No empowerment, low motivation.

Get it done

- Manifestation
  - Belief that best case plans must succeed

- Problems
  - Deferred recognition of plan versus actual.
  - Late discovery and renegotiation.
  - Loss of credibility, mistrust.

Control through milestones

- Manifestation
  - Teams held to waterfall-based project milestones.
  - Unproductive artifacts.
  - Fine grain reporting and overhead.
- Problems
  - Start-wait-start-wait-start-wait projects.
  - Teams produce artifacts they don’t need or want.
  - Teams pretend not to work ahead of milestones.
  - Slow value delivery.

We can plan a full year of projects

- Manifestation
  - Detailed work breakdown structures
  - Earned value metrics.
  - Gantt charts.

- Problems
  - Reporting overhead.
  - Annoying the team.
  - Metrics don’t reflect actual progress.
  - Plans are obsolete but not treated that way

Contrary to Lean Principles (1)

- Widget engineering
  - V1: The Principle of Beneficial Variability—**Variability can create economic value.**
  - V3: The Principle of Optimum Variability—**Variability should neither be minimized nor maximized.**
- Order-taker mentality
  - D1: The Second Perishability Principle—**Decentralize control for problems and opportunities that age poorly.**

Contrary to Lean Principles (2)

- Maximize utilization
  - F1: The Principle of Congestion Collapse—**When loading becomes too high, we will see a sudden and catastrophic drop in output.**
  - F6: The Cadence Capacity Margin Principle—**Provide sufficient capacity margin to enable cadence.**
- Get it done
  - W8: The Principle of Flexible Requirements—**Control WIP by shedding requirements.**

Contrary to Lean Principles (3)

- Control through milestones
  - D8: The Principle of Mission—**Specify the end state, its purpose, and the minimum possible constraints.**
  - D3: The Principle of Layered Control—**Adapt the control approach to emerging information about the problem.**

- We can plan a full year of projects
  - B7: The Psychology Principle of Batch Size—**Large batches inherently lower motivation and urgency.**
  - V6: The Principle of Short-Term Forecasting—**Forecasting becomes exponentially easier at short time horizons.**
  - D4: The Opportunistic Principle—**Adjust the plan for unplanned obstacles and variances.**

Moving to agile Portfolio Management

- Three main activities we described earlier:
- Investment funding.
- Investment change management.
- And governance and oversight.