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Budgeting, Estimation, Planning,
#NoEstimates and the Agile Planning Onion

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All Budgets, Estimation and Plans Are . . .



Fantasies
. . . more or less

Why Do We Budget, Estimate and Plan

Why centers on answering a four very basic questions:

- When will “it” be done?
- How much will “it” cost?
- What is “it” that I will actually get?
- What can I afford?

Budgeting v Estimation v Planning

Budgeting

- How much money should I allocate?
- Which projects or products should we fund?
- Which projects will return the greatest amount of value?

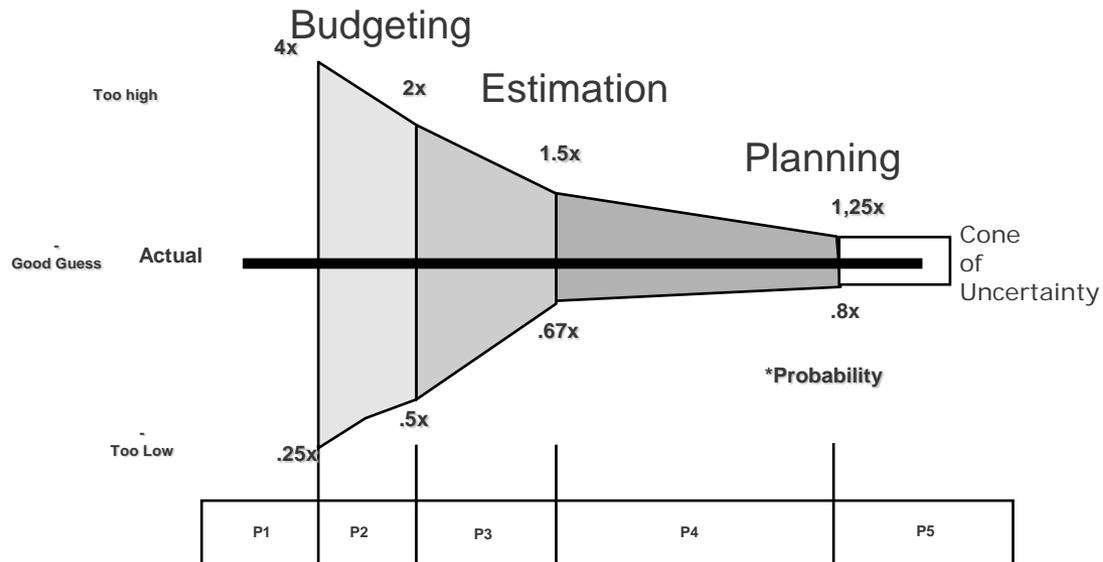
Estimation

- What can be delivered?
- When can we deliver?
- How should teams be allocated?

Planning

- What tasks need to be completed?
- Who needs to complete specific tasks and when?

The Cone of Uncertainty

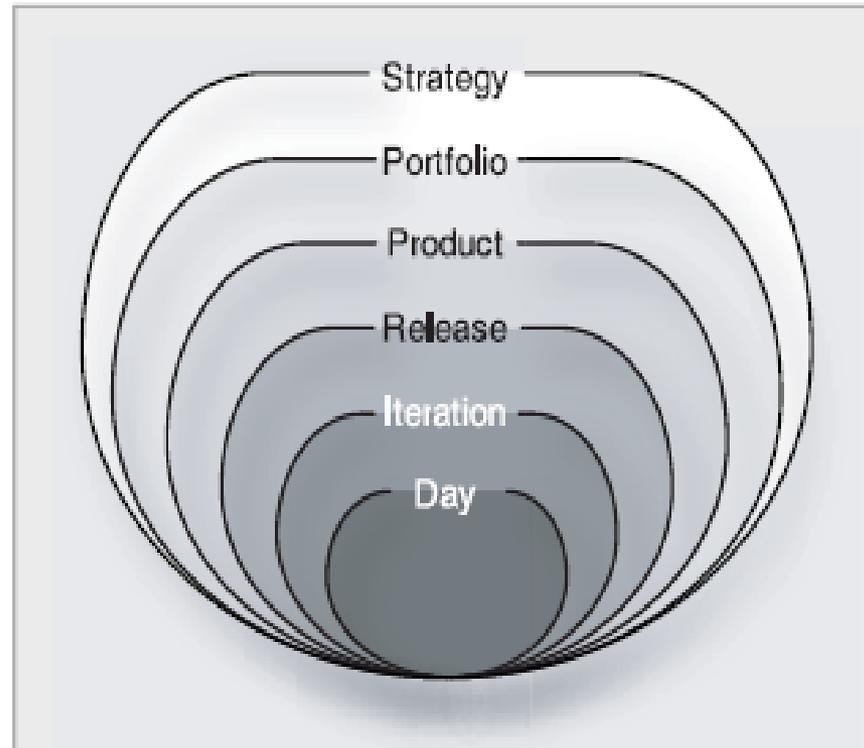


All work has a cone of uncertainty
– Sales, Testing, Messaging
All: different steps and widths!

Time . . .

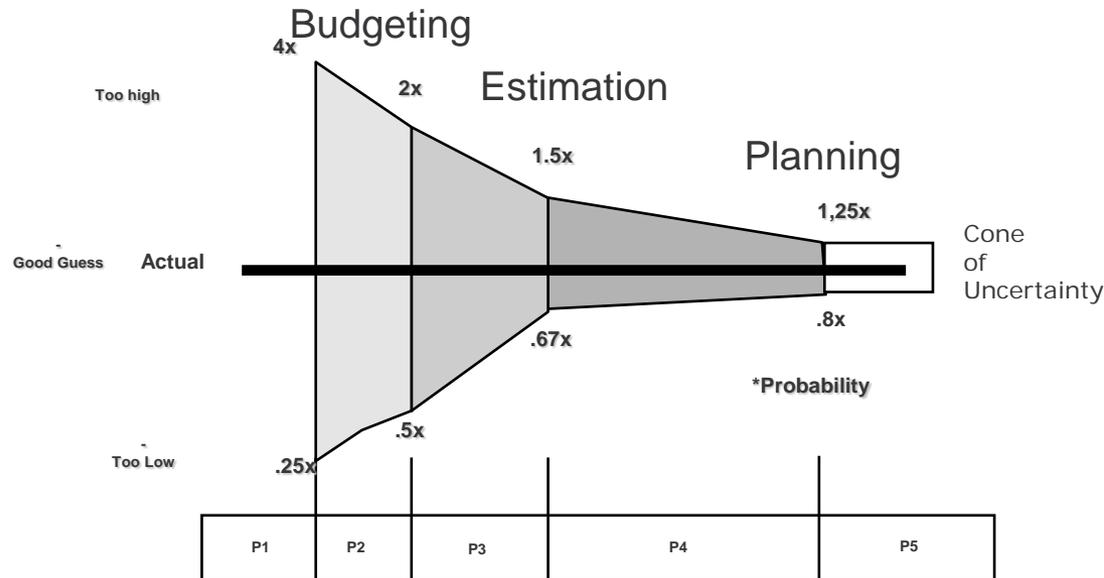


Planning Flow In Agile



Mike Cohn's Planning Onion

Classic Budgeting, Estimation and Planning



- The budgeting process is a forecast helps make decisions about which pieces of work are to be done.
- The estimate (believed to be more accurate) makes a project about when the work will be completed (estimates the four questions).
- Planning provides tactical, task level guidance.

Budgeting Answers

How much money should I allocate for software development, enhancements and maintenance?

Which projects or products should we fund?

Which projects will return the greatest amount of value?

Most organizations have a portfolio of work that is larger than they can accomplish, therefore they need a mechanism to prioritize.

Defining An Estimate

Targets

- Statement of a desirable business objective
- Example: Taxes must be paid by April 15th

Commitments

- A promise to deliver
- Example: I promise not to leave my taxes until the last minute

Estimates

- A prediction
- Example: Preparation of my taxes will require many pots of coffee, a large part of a bottle of aspirin, an internet connection and around two weekends to complete.

Impact of Ineffective Estimating

Impact of major schedule slippage is often dramatic:

1. Unrecoverable revenue losses
2. Not first to market
3. Public failure
4. Possible legal repercussions

Corporations are more significantly impacted by schedule pressures than any other factor

Does The Past Predict The Future?

A story of childish hijinks, black paint, a truck and straight roads.



Sometimes prediction depends on the context.

Estimation Pathologies Via Jim Benson

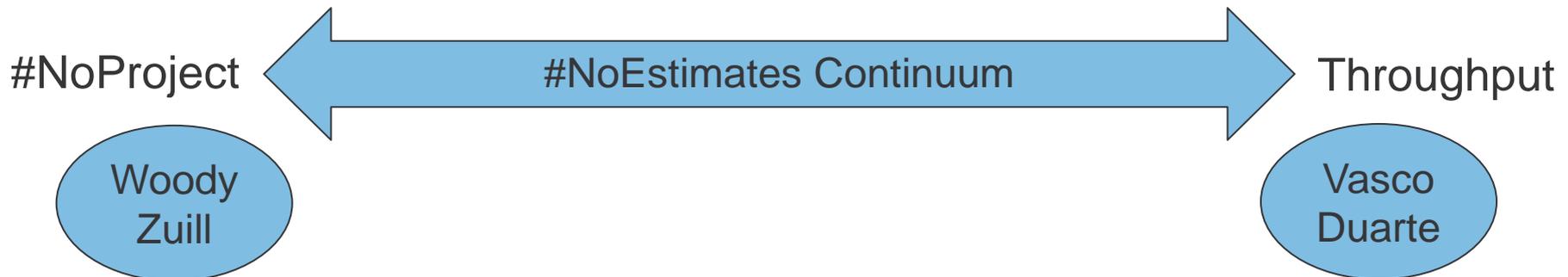
The three -level process described above, if misused, can cause several team and organizational issues. Proponents of the #NoEstimates movement often classify these issues as estimation pathologies. Jim Benson, author of *Personal Kanban*, established a taxonomy of estimation pathologies that includes:

- Guarantism – a belief that an estimate is actually correct.
- Swami-itis – a belief that an estimate is a basis for sound decision making.
- Craftosis – an assumption that estimates can be done better.
- Reality Blindness – an insistence that estimates are prima facie implementable.
- Promosoriality – a belief that estimates are possible (planning facility)

#NoEstimates Reflects A Continuum of Thought

- Break work down in small chunks
- Assemble minimum viable product (MVP) for feedback.
- Generate continuous feedback and re-planning.

- Break work down in small chunks
- Continuously measure throughput.
- Average throughput used for forecasting



When Does #NoEstimates Work?

The idea of #NoEstimates can be applied at the level of planning and estimation IF the right conditions are met. Conditions include:

- Stable teams
- Adoption of an Agile mindset (both team and organizational levels)
- A backlog of well-groomed stories

For a sprint a team can easy answer:

- When will “it” be done?
- How much will “it” cost?
- What is “it” that I will actually get?
- What can I afford?

Planning Onion and Timing



Budgeting
Analogy

#NoEstimates
(Type I)

#NoEstimates
(Type II)

Case Study Context

Large software development firm, moderately hierarchical culture and several very large project and many smaller

Mixed of SCRUM/XP, Kanban, SAFe for some large programs and Plan Based projects

Strenuous budgeting process with tax accruals

Entrenched Program Office provides administrative functions

Mixture of internal projects and outsourced work.

Evolution

High Level Estimation (product and release):

Release Plans and product road maps were easily be built from forecasts for all external products and internal applications with 500 users or more.

Agile teams that with a track record of delivering value on a regular basis. Were allowed to leverage #NoEstimates for planning. Other conditions include:

- Stable Teams
- Agile Mindset (both team and organizational levels)
- Well-groomed stories

All projects and products are required to find a way to answer the classic questions of when, what and how much work will cost whether the work is done by single teams or by scaled Agile programs.

Technique Pallet

Budgeting Techniques

- Analogy (Macro)
- Business Case
- Road Mapping

Estimation Level Techniques

- Parametric Estimation
- Analogy
- Planning Poker and Rate (form of release planning)
- #NoEstimates (Flow)

Planning Techniques

- Work Breakdown Structures (Plan Based)
- Points (various) and Sprint Planning
- Points (various) and Continuous Flow (Kanban)
- Stand Up Meetings
- #NoEstimates (Flow)

Not All Happiness - Contractual Agile

All outsourced contracts being transitioned to fixed cost and date contracts leveraging a hybrid Scrum / Plan Based project management solution. The PMO actively tracks these vehicles. #NoEstimate techniques are not allowed in this organizations contract vehicles.

- Raja Bavani, Senior Director at [Cognizant Technology Solutions](#) stated in a recent conversation, that he thought that #NoEstimates was a non-starter in a contractual environment.

Final Thoughts

All budget, estimates and plans are by definition are imprecise

Only be accurate within a range of confidence

The single number contract which generates anger and frustration fueling #NoEstimates movement.

#NoEstimates and classic estimation are tools to generate feedback and create guidance.

The goal is usually the same, it is just that the mechanisms are very different.

Questions

