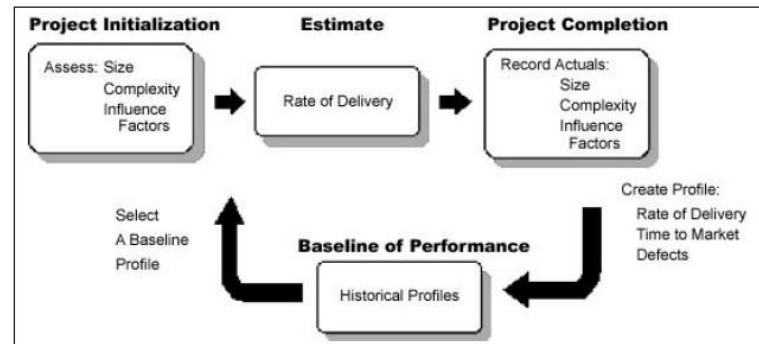


# ISMA 11

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

2015



Measure. Optimize. Deliver.

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# All Budgets, Estimation and Plans Are . . .

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Fantasies  
. . . more or less

# Why Do We Budget, Estimate and Plan

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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

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## Budgeting

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

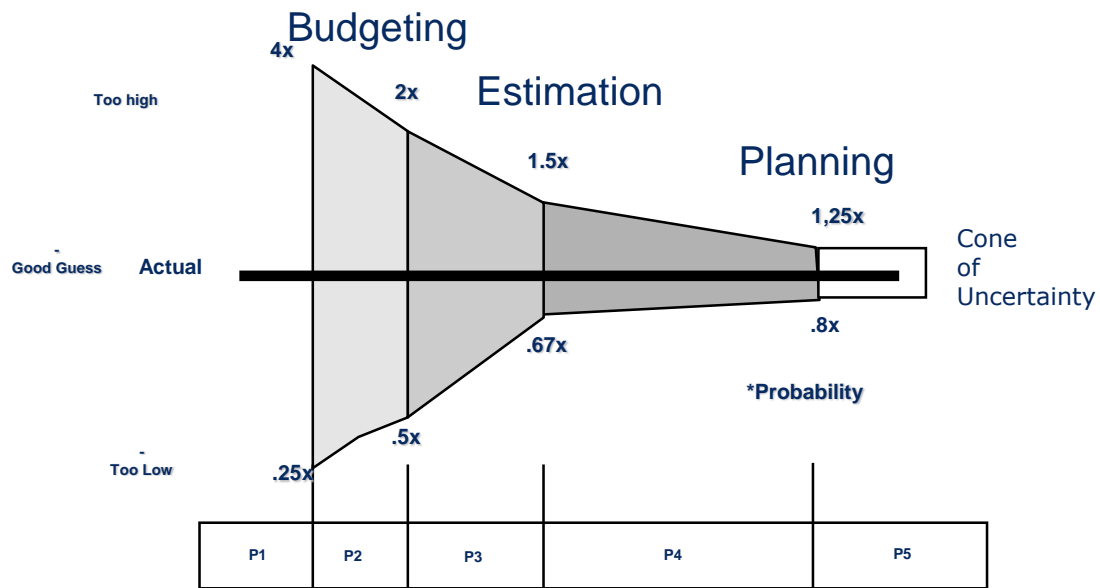
## Estimation

- 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!

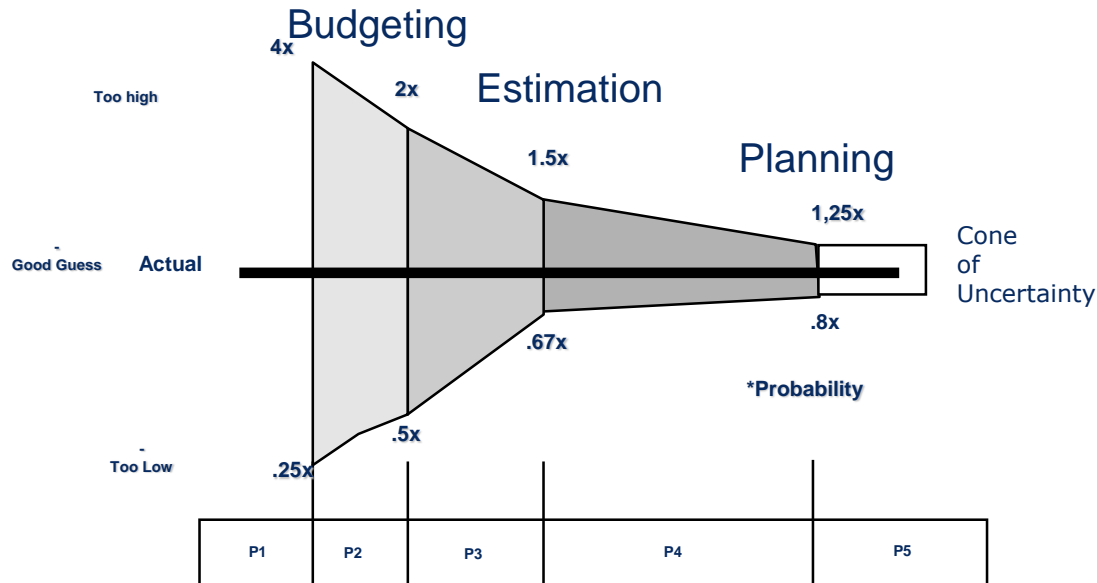
# Time . . .



# Planning Flow In Agile



# 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

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- 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

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- 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

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- 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?

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



Sometimes prediction depends on the context.

# Revisiting Why

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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?

# Estimation Pathologies Via Jim Benson

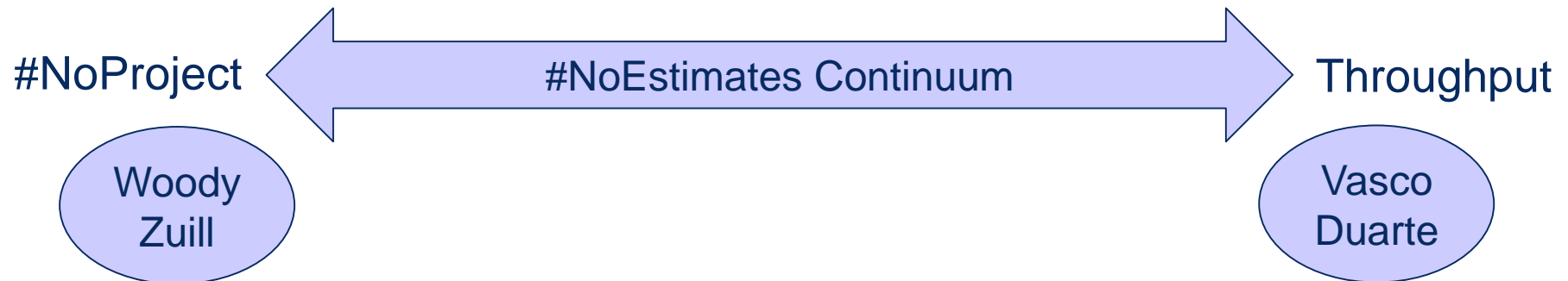
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- The three -level process described above, if misused, can cause several team and organizational issues. Proponents of the #NoEstimates movement often classify these issues as estimation pathologies. Jim Benson, author of *Personal Kanban*, established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



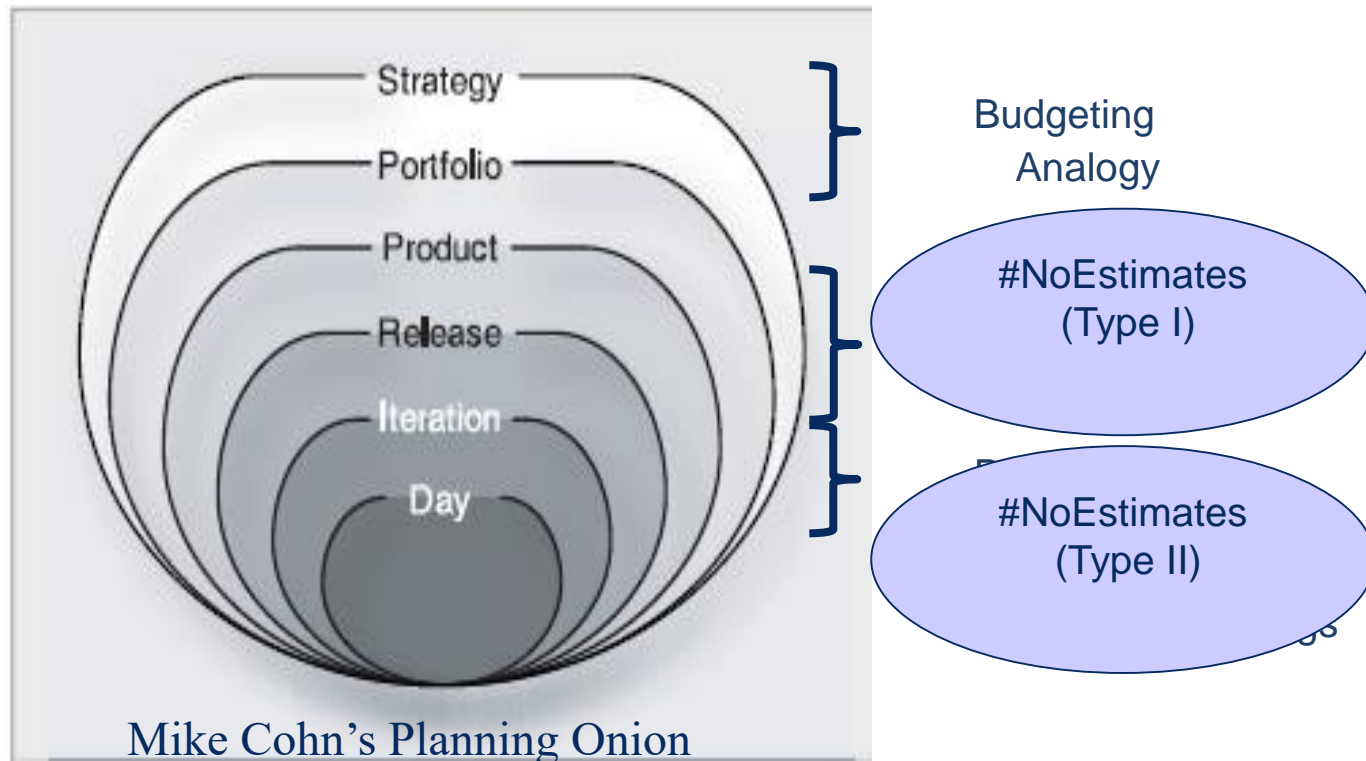
## When Does #NoEstimates Work?

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- 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



# Coexistence In Real Life

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Budgeting, Estimation, Planning, #NoEstimates and the Agile Planning Onion are tools to . . .

- » Prioritize
- » Generate feedback
- » Provide guidance

# Case Study Context

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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

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- 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

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- 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)

\* Using IFPUG Function Points

## Not All Happiness - Contractual Agile

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- 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

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- 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

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