#NoEstimates does not mean “no estimates!”

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Claysnow Limited
Your company **NEEDS** that estimate

Friday, 24 April 15

http://claysnow.co.uk
You won’t notice we’re there

I’ll be back tomorrow to finish off

That will be fixed before we leave

We don’t make mistakes like other builders

All our previous customers are completely satisfied

You’ll be in by Christmas
Integration takes hardly any time

The project status is still green

We will deliver with zero defects

It's working in the test environment

On time, on budget every project

We're 90% done

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Observed Cycle

http://ajcp.ascpjournals.org/content/134/3/361/F1.large.jpg
Estimation pathologies

1. Guarantism
   The belief an estimate is actually correct.

2. Promisoriality
   The belief that estimates are possible

3. Swami-itis
   The belief that an estimate is a basis for sound decisions

4. Craftosis
   The assumption that estimates can be done better

5. Reality Blindness
   The insistence that estimates are implementable

6. Accept-ism
   The belief that I have to provide an estimate now

http://moduscooperandi.com/blog/modus-list-3-our-five-estimate-pathologies/
http://neilkillick.com/2015/03/22/a-6th-estimate-pathology/

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“Old fogies know your estimates will be bogus.

They know you won’t get them right.

They know you won’t hit the deadline with full scope”

http://xprogramming.com/articles/artifacts-are-not-the-problem/
So, why do we estimate?

- Prediction
- Prioritisation
- Analysis and understanding of requirements
- Blame!
Prediction
“I try not to get involved in the business of prediction.

It's a quick way to look like an idiot.”

Warren Ellis, author & humanist
The Cone of Uncertainty in Project Management
Overconfidence
"We aren't really bad at estimating.

What we are really bad at is enumerating all the assumptions that lie behind our estimates."

-Paul Rook
... these studies which have for a few years now given rise to the claim that "research shows that people are better at relative than absolute estimation" do not in fact seem to square with that claim.

This doesn't entail that relative estimation doesn't work - only that it is not proven.
Why predict?
Release planning

Resource allocation

When?

How much?

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Release planning
Naked Planning

1. MMFs
2. In progress
3. Average delivery time from here: ?? days
4. Urgent

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Probabilistic planning

...uses **historical** data or a model of expected capability to build a **forecast** of the project outcome
Little’s Law

\[
\text{Delivery Rate} = \frac{\text{WIP}}{\text{Lead Time}}
\]

http://www.djaa.com/project-management-kanban-part-3-forecasting

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Resource allocation
If a project is estimated to cost £1 million how important is it to bring it in on budget if it will deliver £200 million of benefit?
Estimation:

A Paradigm Shift Toward Dynamic Design-to-Cost and Radical Management

“Accurate estimation is impossible for complex technical projects, but keeping to agreed budgets and deadlines is achievable by using feedback and change.”

http://www.gilb.com/dl460

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Scope
(Features, Functionality)

Quality

Resources
(Cost, Budget)

Schedule
(Time)

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http://www.ambysoft.com/artwork/ironTriangle.jpg

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Brooks's Law: Adding manpower to a late software project makes it later.

(Fred Brooks)


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How long will your project take if I add two people?

Add one month for training, one month for the extra complexity, and one month to deal with their drama.

But after all of that... they'll be as useful as this meeting.
Governance and transparency

1. Values
Bind people to a common cause; not a central plan

2. Governance
Govern through shared values and sound judgement; not detailed rules and regulations

3. Transparency
Make information open and transparent; don’t restrict and control it
12 Beyond Budgeting Principles

Accountable teams

4. Teams
Organize around a seamless network of accountable teams; not centralized functions

5. Trust
Trust teams to regulate their performance; don’t micro-manage them

6. Accountability
Base accountability on holistic criteria and peer reviews; not on hierarchical relationships
Goals and rewards

7. Goals
Set ambitious medium-term goals, not short-term fixed targets

8. Rewards
Base rewards on relative performance; not on meeting fixed targets
Planning and controls

9. Planning
Make planning a continuous and inclusive process; not a top-down annual event

10. Coordination
Coordinate interactions dynamically; not through annual budgets

11. Resources
Make resources available just-in-time; not just-in-case

12. Controls
Base controls on fast, frequent feedback; not budget variances
Prioritisation
Why prioritise?
Common anti patterns

✓ Focus on managing cost and not value.
✓ Prioritize with size as the most important input.
Estimation:
A Paradigm Shift Toward Dynamic Design-to-Cost and Radical Management

“...rather than trying to improve the initial project estimates, the budgets and deadlines must be set based on the value of delivery (not the cost).”

http://www.gilb.com/dl460
http://claysnow.co.uk

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Cost of delay

... is a way of communicating the impact of time on value.
For ideas with a very long-life, with peak unaffected by delay
Getting started with Cost of Delay:

1. Identify benefit types
2. Consider urgency
3. Estimate peak benefits
4. Calculate Cost of Delay

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http://blackswanfarming.com/cost-of-delay/  
http://claysnow.co.uk

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Cost of delay

1. Better Decision-making – by making the economic trade-offs **visible**

2. Better Prioritisation – by using CD3 (Cost of Delay Divided by Duration) we deliver more **total value**

3. By changing the focus – from efficiency and cost (which encourages the wrong behaviours), to **speed and value**
Analysis
Is it small, or just far away?
HOW TO SPLIT A USER STORY

1. PREPARE THE INPUT STORY
   - Does the big story satisfy INVEST® (except, perhaps, small)?
     - No
     - Yes
   - Combine it with another story or otherwise reformulate it to get a good, if large, starting story.

2. APPLY THE SPLITTING PATTERNS
   - Workflow Steps
     - Can you take a thin slice through the workflow first and enhance it with more stories later?
     - Can you split the story so you do the beginning and end of the workflow first and enhance with stories from the middle of the workflow?
   - Operations
     - Can you split the operations into separate stories?
     - Can you split the story so you do a subset of the rules first and enhance with additional rules later?
   - Business Rule Variations
     - Does the story include multiple operations? (e.g., is it about "managing" or "configuring" something?)
     - Does the story have a variety of business rules? (e.g., is there a domain term in the story like "flexible dates" that suggests several variations?)
   - Variations in Data
     - Does the story do the same thing to different kinds of data?
     - Can you split the story to process one kind of data first and enhance with the other kinds later?
   - Interface Variations
     - Does the story have a complex interface?
     - Can you split the story to handle data from one interface first and enhance with the others later?

3. EVALUATE THE SPLIT
   - Is each story about 1/4 to 1/2 of your velocity?
     - Yes
     - No
   - Are the new stories roughly equal in size?
     - Yes
     - No
   - Are there stories you can deprioritize or delete?
     - Yes
     - No
   - Try another pattern on the original story or the larger post-split stories.

Visit http://www.richardlawrence.info/splitting-user-stories/ for more info on the story splitting patterns

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Toyota’s secret

“The A3 Process helps people engage in collaborative, in-depth problem-solving”

http://www.coe.montana.edu/ie/faculty/sobek/a3/index.htm
http://www.amazon.co.uk/The-Thinkers-Action-Deck-Brainstorming/dp/B00CQ9CVBO

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“The collection of Cracking Big Rocks cards ask questions and give you suggestions to help you get perspective. They can help you come up with unexpected answers, and choose new avenues to pursue.”
Faced with a choice, do both

You don't have to be ashamed of using your own ideas
Deliberate discovery

“... during an inception, when we are most ignorant about most aspects of the project, the best use we can possibly make of the time available is to attempt to identify and reduce our ignorance”

http://dannorth.net/2010/08/30/introducing-deliberate-discovery/
#NoEstimates
Woody Zuill


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http://noestimatesbook.com/
The idea behind the #NoEstimates approach to software development isn't to eliminate estimates

[it is] to explore other ways to solve problems

without specifically asking, 'How long will it take?'

Giving software projects an API... [is] about

“yes, yes, yes, yes”.

http://xprogramming.com/articles/artifacts-are-not-the-problem/
Take aways

**Challenge** the use of estimates
- what are they we trying to achieve?

What’s the **value** of the project
- estimates of cost may not be necessary

Is it small or just far away?
- **ignorance** is our major constraint
Finally....

Ask yourself whether the value you get from estimates justifies the cost of producing them.

#NoEstimates is the banner under which people who answer “NO!” are looking for better, cheaper ways of getting the benefits that we want, without the waste that we don’t.
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