

Estimation: The Art of the SWAG

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bounteous



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- VP, Drupal Engineering at Bounteous
- Building Drupal sites and platforms for over 10 years
- When I'm not working I...read books, look at the night sky, do jigsaw puzzles, and coach/play/watch baseball and softball.

Culture is Foundational to Retention, Collaboration & Success

Bounteous brings together engineers, data scientists, marketers, analysts, strategists, and design thinkers, whose combined expertise, ideas, and innovation enable us to succeed where others fail. We are a privately-owned, private equity backed company with Collaboration Centers across North America.

700+

collaborative
team members

20+

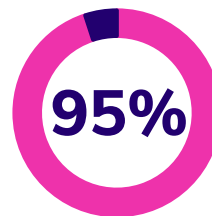
years of content,
commerce, and
conversion experience

185+

career
coaches
and mentors

4.3 ★★★★★

Glassdoor
review score



team members
say Bounteous
is a great
place to work
[greatplacetowork.com](https://www.greatplacetowork.com)

1000+

analytical and
advertising minds
trained annually

300+

industry and
partner certifications

20K+

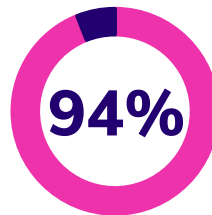
training and
development
hours in '20

\$75K+

charitable match
giving in '20

260+

annual hackathon
participants



historical
retention



AGENDA

Estimation Basics

Different Estimation Approaches

Tips and Strategies

Questions



Estimation Basics

What is an estimate?

An approximate calculation or judgment of the value, number, quantity, or extent of something.

We estimate every day...

1. When will I arrive?
2. When can I finish this task by?
3. When is dinner going to be ready?
4. Can I get the lawn cut before the rain arrives?

What an estimate is not...

1. A Guess
2. An Exact Answer
3. Static
4. (Easy to do)

Preparing to estimate

- How much will this cost?
- When will this be done?
- Should this be done?
- Given this timeline/budget, what is possible?
- Should we do Project A or Project B?

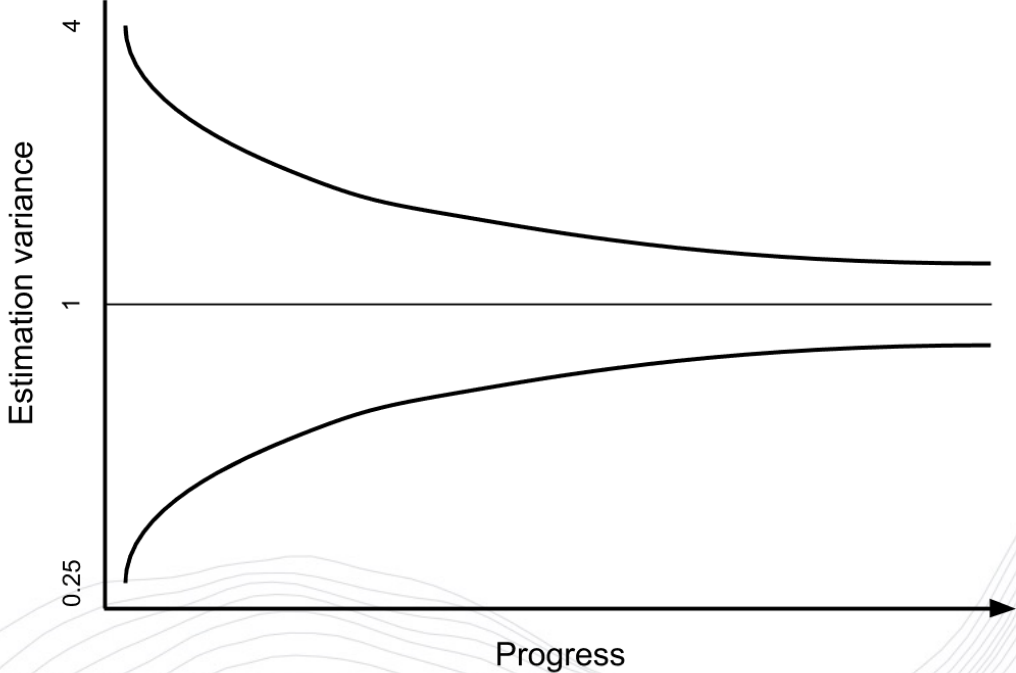
Preparing to estimate

- How accurate does the estimate need to be?
- What precision is needed for the estimate?
- How confident do you need to be in the estimate?
- What direction should the error be made in?

Preparing to estimate – more questions

- What kind of solution is expected?
- Is this a new or existing 'client'?
- For an agency, what is the landscape for the opportunity?

When?



We only know the project cost or length with 100% certainty when it is complete



Different Estimation Approaches

Description:

Take the new project and compare it to other completed projects.

Best use-case:

Where quick, rough estimates are needed

Positives:

Easy to complete and gets easier as you gain experience.

Negatives:

Need actual data to do the comparison

Description:

For large projects, comparison-based can be challenging, so we can decompose the larger projects to compare.

Best use-case:

Where quick, rough estimates are needed

Positives:

Many ways to decompose a project to do the comparison.

Negatives:

Need actual data of the decomposed parts

Bottoms-Up Estimate

Description:

Take the project and break down the features and tasks so that you are estimating many smaller pieces.

Best use-case:

Where accuracy/precision are important

Positives:

Smaller things are 'easier' to estimate.
More estimates more errors

Negatives:

Easy to get fixated on the individual estimates

Description:

Find things in the project that correlate with what you are trying to estimate and count them up.

Best use-case:

Pretty much any stage of a project (though you want more than a handful of things to count)

Positives:

Everyone can count
Surprisingly accurate

Negatives:

Need historical data (the more the better)
Counted objects need to be consistent between projects

T-Shirt Sizes Estimate

Description:

Broken down by feature and then assigned a t-shirt size (S, M, L, XL, etc.). Each size is assigned a value and the total computed

Best use-case:

Good for rough estimates

Positives:

Quick and easy way to understand the effort needed.
T-shirt sizes are easy to understand and assign

Negatives:

As the feature sizes get larger, it's harder to estimate

Description:

A plan listing out the needed skill sets, when needed, for how long and how much time.

Best use-case:

Before the start of a project or a critical inflection points

Positives:

Give you a better understanding of the true cost
Accounts for items generally missed in other methods

Negatives:

Hard to get correct, especially for longer projects
Teams tend to anchor on it, even with project needs change



Tips and Strategies

We only know the project cost or length with 100% certainty when it is complete

You need to convey, in some way, your confidence level in your estimate

The assumptions you made to get to an estimate are as important as the estimate itself

When estimating, don't assume that the most qualified person on your team will be doing the work.

Don't imply a preciseness that your estimate is not providing.

For a project estimate to be accurate, the project leadership needs to exert project control.

“

A good estimate is an estimate that provides a clear enough view of the project reality to allow the project leadership to make good decisions about how to control the project to hit its targets.

Steve McConnell

Underestimating a project by a significant margin will cause it to be even later/more overbudget than you would expect. Prefer overestimates to underestimates.

SUMMARY

Understand the question being asked

Cone of Uncertainty

Compare using actual data

GOOD BOOKS TO READ

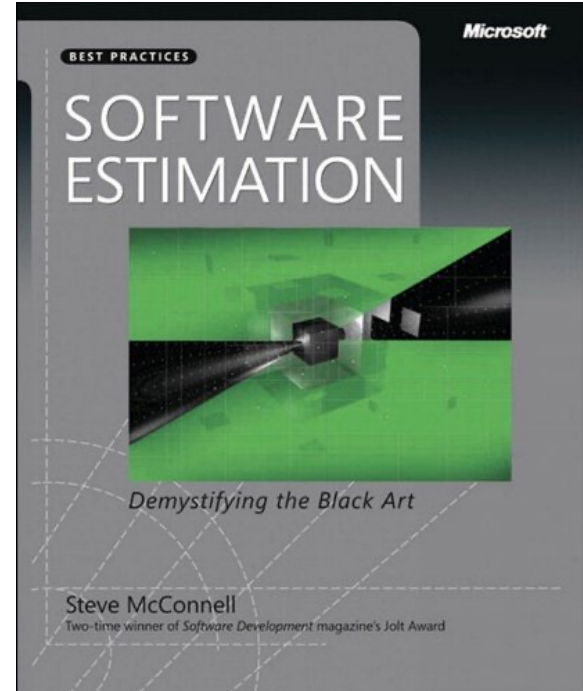
The Pragmatic
Programmers

Software Estimation Without Guessing

Effective Planning
in an Imperfect World



George Dinwiddie
edited by Adaobi Obi Tulton





Questions

Thank you!
