Feature or Project Size Assumption Worksheet



Step 1 – Split the project or feature if possible.

Splitting features and projects into smaller batches helps keep uncertainty to manageable levels. People are better at judging small to medium size features and projects versus large and huge sized projects. Always look for ways to split work into smaller batches before estimating and forecasting.

Step 2 – Choose the units of measure for size.

Best (lowest effort)

Count of stories

A low and high estimate of how many features or stories it will take to deliver a bigger feature

Pros:

- Lowest effort
- Supports ranges

Cons:

 Diverges if stories are wildly different sizes for one feature versus another

Counts of size buckets

Counts of how many "large," "medium," and "small" stories to deliver a bigger feature

Pros:

- Supports ranges
- Handles coarse size variation

Cons:

 Requires stories to be bucketed in each of the groups

Sum of "story points"

Each feature or story is estimated in relative arbitrary units calibrated to time by velocity

Pros:

- Supports ranges (but rarely done)
- Handles story size variation

Cons:

 Requires every story to be analyzed and estimated

Worst (highest effort)

Sum of time estimates

Each feature or story is estimated is expected actual delivery time

Pros:

Handles story size variation

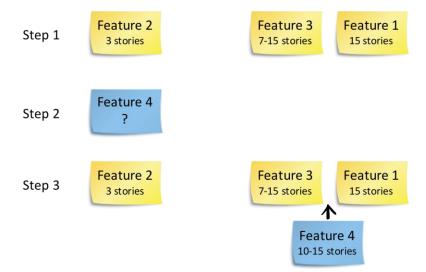
Cons:

- Highest effort
- Doesn't account for system impacts on delivery time

Step 3 – Create range estimates (low to high) for each project or deliverable feature in the size unit chosen in step 2.

Method 1: Reference Class Range Forecasting (preferred)

- 1. Lay out prior features across a table from lowest to highest story count.
- 2. Introduce the feature being estimated.
- 3. The group picks a position on the table where this feature fits relative to the others $\frac{1}{2}$
- 4. Get agreement on an optimistic (low count) and a pessimistic (high count)



Method 2: Low and High Range Estimate (with 90th Confidence)

- 1. Start with some calibration exercises. Practice guessing value ranges and researching you are right 9 times out of 10 (90th Confidence Interval). Help people expand the ranges until they are truly confident estimating to 9 in 10 chance.
- 2. Introduce the feature being estimated.
- 3. Discuss different approaches to delivering the feature. Decide what approach the group is pursuing. Failure to do this will have half the group estimating one thing and the other half estimating something else.
- 4. Ask: What would be the likely minimum number of stories needed to do this feature. Discuss and find some agreement.
- 5. Ask: What would be the likely maximum number of stories needed to do this feature. Discuss and find some agreement.
- 6. Challenge the group. Make an equivalence bet. Ask the group if they would rather take a chance of winning or losing \$1,000 hypothetical dollars if the actual falls in the range, OR the chance of pulling a green ball out of a bag with 9 green balls and one red. Adjust the range until more confidence in the estimates.

References: How to measure anything (Douglas Hubbard). The Failure of Risk Management (Douglas Hubbard). Risk Intelligence (Dylan Evans).