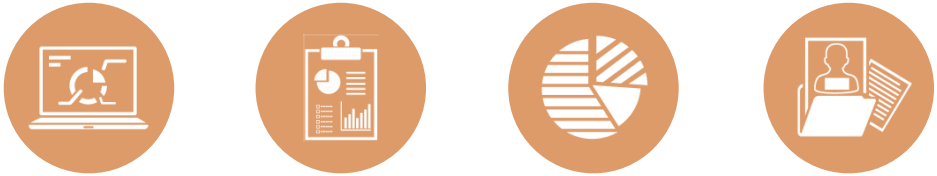
PMI®—Agile Certified Practitioner (PMI-ACP)®

Agile Estimation: Part 2



Objectives

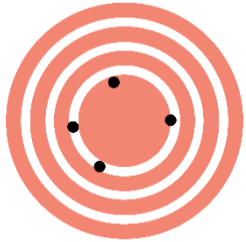
After completing this lesson, you will be able to:

- Differentiate between accuracy and precision
- Explain Agile Wideband Delphi process and Agile Affinity Estimation
- List the steps of Wideband Delphi and Agile Affinity Estimation processes

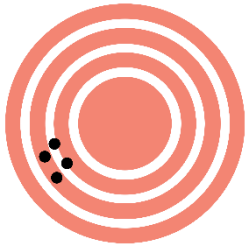
Accuracy vs. Precision

Agile estimates strive for accuracy, but not precision as achieving precision makes the estimation process lengthy and expensive.

- Accuracy strives for converging on the standard or known value.
- Precision is about repeatability.
- In software development, precision is very difficult to establish.



Accuracy

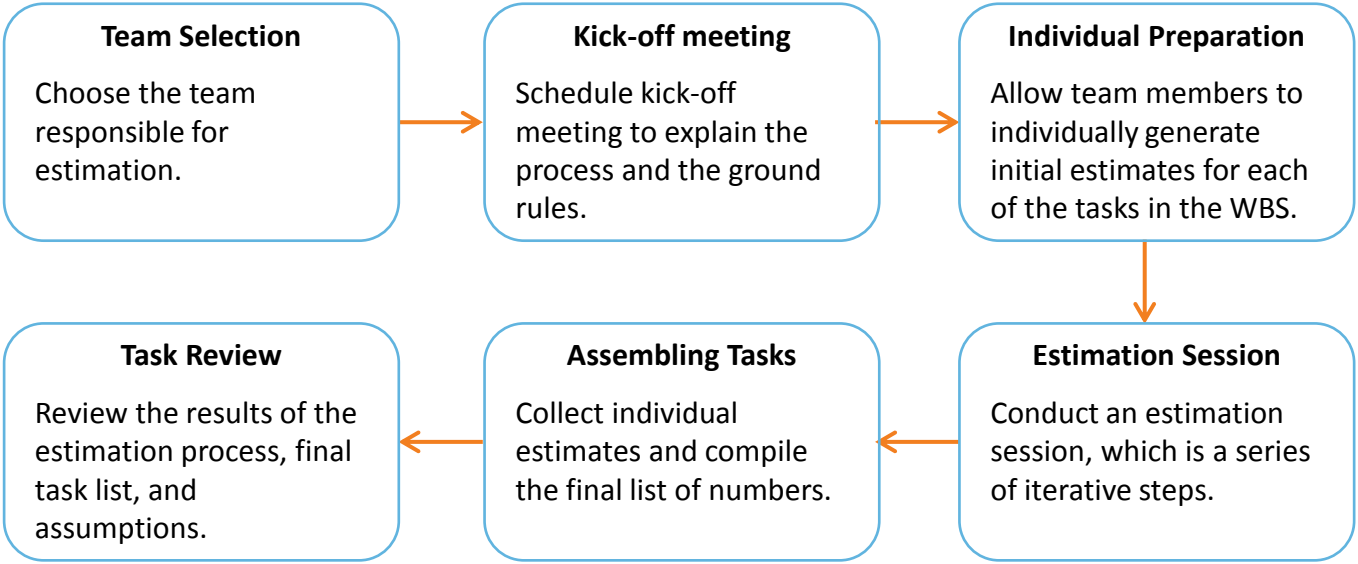


Precision

Wideband Delphi is a process that the team can use to generate an accurate estimate.

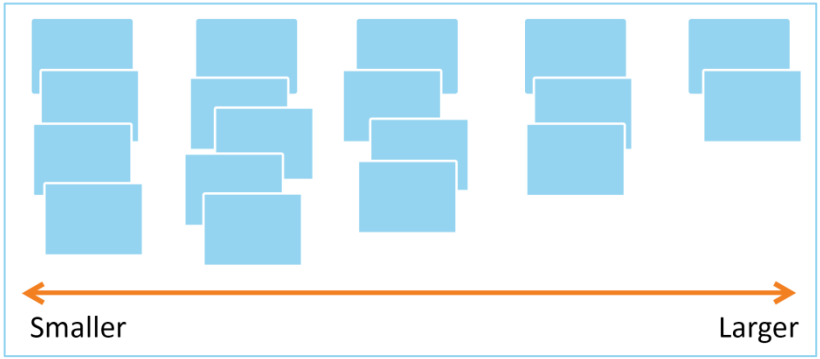
- The project manager chooses an estimation team, comprised of knowledgeable experts (sometimes consultants) and through a series of sessions gains consensus among the team an estimate.
- This technique is a repeatable process because it consists of a straightforward set of steps that can be performed the same way each time.
- The drawback of this technique is it requires more effort and coordination to develop the estimate.

The steps involved in the Wideband Delphi technique are as follows:



Affinity Estimation is a technique used by teams to estimate (in story points) a large number of user stories. The advantages of Affinity Estimation are as follows:

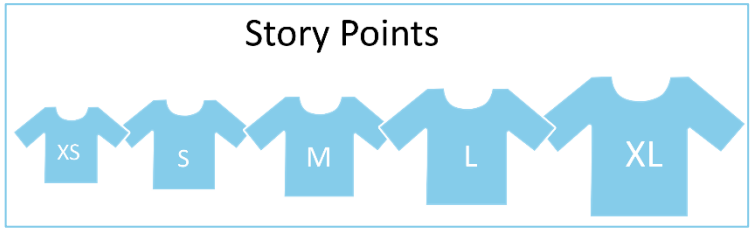
- It is quick and easy.
- Decision making process is transparent and visible.
- It creates a positive experience rather than confrontational exercise.



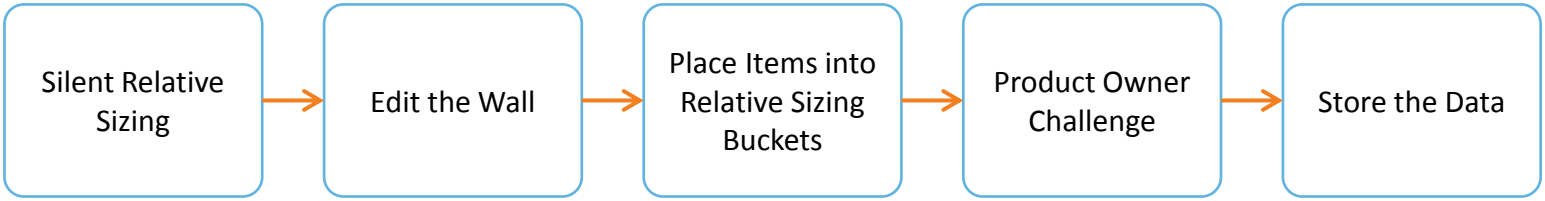
Estimation Using T-Shirt Sizing

A popular agile relative estimating technique is to use T-shirt sizes.

- It is easy to use.
- It is a good way to introduce teams to relative estimating.
- It is very effective for Affinity Estimating.
- There is a need to find stories that act as a benchmark for each T-shirt size.



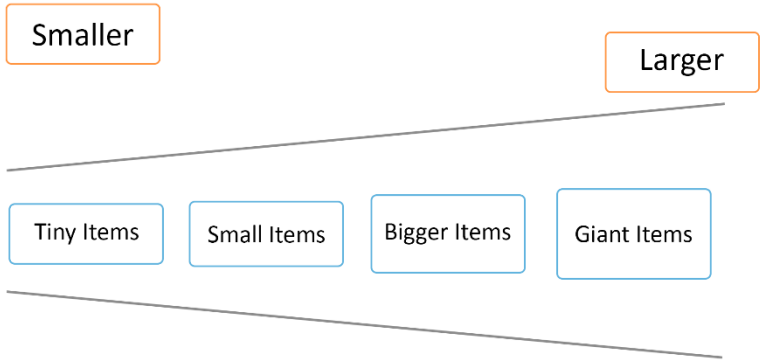
The flow of the steps in the Affinity Estimation process is given below:



Silent Relative Sizing

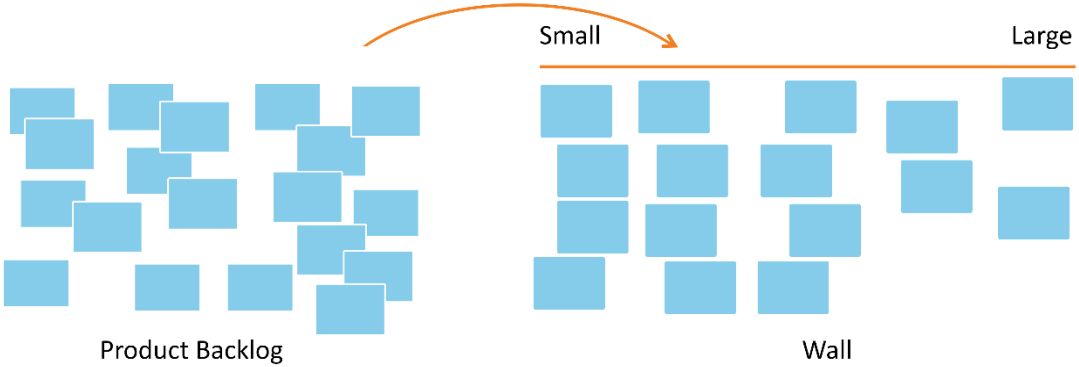
The first step in the Affinity Estimation is silent relative sizing. Find below the processes of implementing this step:

- Product backlog is provided by the product owner.
- Stories are arranged horizontally.
- Team members are expected to size each item relative to other items on the wall considering the effort involved in implementation.



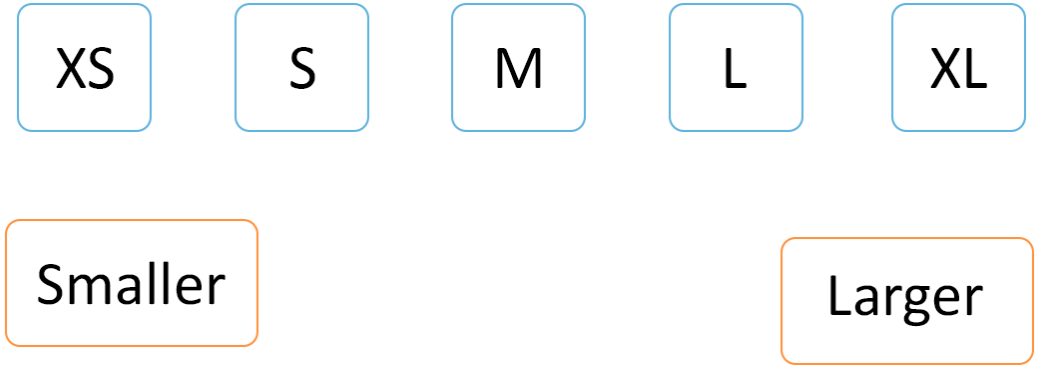
The second step in the Affinity Estimation is edit the wall. This step involves the following processes:

- Editing the relative sizing on the wall.
- All the items in the product backlog are placed on the wall and moved in either direction according to the relative sizing. A discussion is conducted and decisions are made, based on this.



The third step in the Affinity Estimation is placing the items into relative size buckets.

- Depending upon the nomenclature that the team(s) decided to use, place the sizes along the spectrum at the top of the wall between smaller and larger.

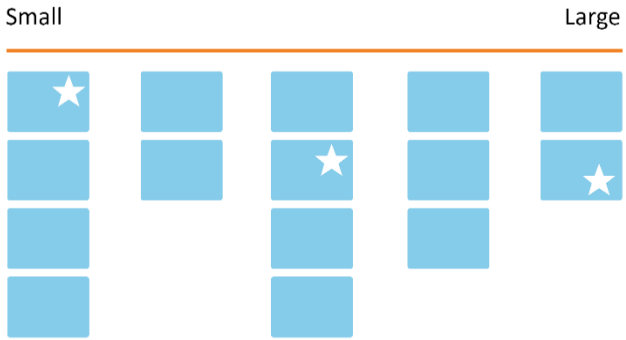


Place Items into Relative Size Buckets (contd.)

The product owner discusses the size of the stories of the product backlog.

Following approaches can be taken in case of changing sizes:

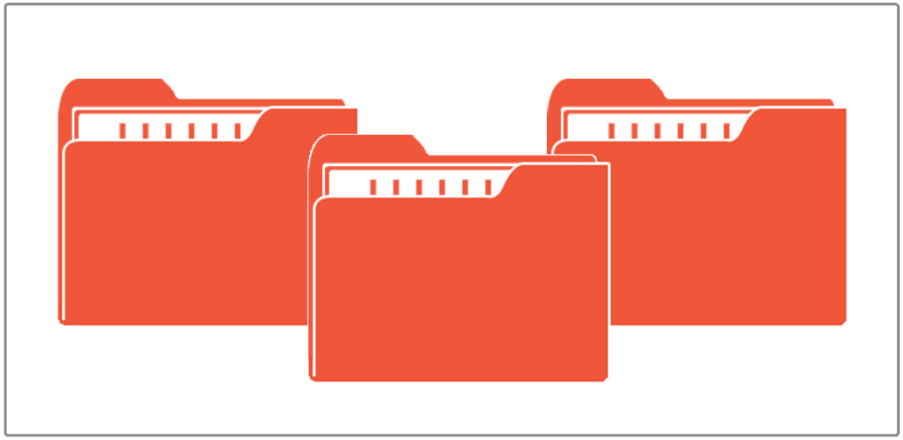
- After the challenge has been completed, team members decide that an item should be resized and put onto a separate wall for resizing.
- Team members can decide with the product owner on what the new size should be.



Store the Data

The last step in the Affinity Estimation is store the data.

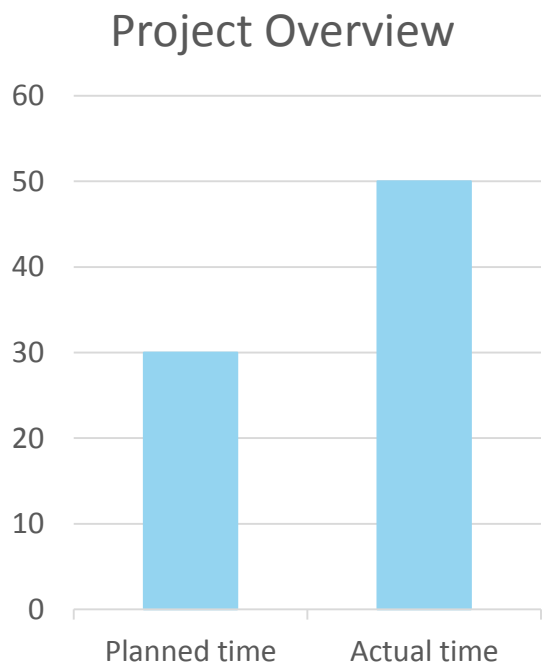
- Under this step, the estimates are documented and stored.
- This step marks the close of the Affinity Estimation process.



Real Life Example

According to Standish group survey, 68% of projects failed to meet the original estimates during the disruption of global financial system. Interviews with venture capitalists and researches show that:

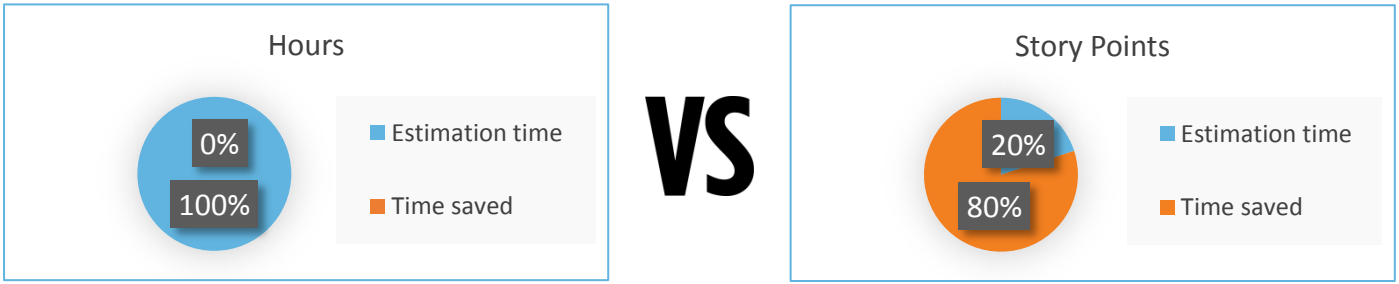
- Gantt charts presented by management teams in board meetings did not correctly represent their team's production velocity;
- many companies continue to follow traditional techniques, and prefer to get acquired or go bankrupt than improve their project management techniques; and
- humans are not good at estimating hours.



Real Life Example—Explanation

SIEMENs a CMMI Level 5 company determined that story point estimation cuts estimation time by 80%, allowing teams to do more estimation and tracking than a typical waterfall team. Likewise a telecom company noted that estimated story points with Planning Poker gave better estimates and were 48 times faster than waterfall estimation.

- Story points are faster, better, and relatively more economic.
- Highest performing teams abandon hourly estimation as they consider it futile.



QUIZ 1	What does T-shirt sizing mean?

a. A relative sizing technique to compare stories to one another

b. A technique to have multiple experts estimate a project

c. A way of comparing developers

d. Wideband Delphi

QUIZ 1

What does T-shirt sizing mean?

a. A relative sizing technique to compare stories to one another

b. A technique to have multiple experts estimate a project

c. A way of comparing developers

d. Wideband Delphi

Answer: a.

Explanation: T-shirt sizing is a relative sizing technique.

QUIZ 2	Would mute mapping be a technique used in Affinity Estimating?

a. No

b. Yes

c. Only for ideal days

d. None of the above

QUIZ 2	Would mute mapping be a technique used in Affinity Estimating?

a. No

b. Yes

c. Only for ideal days

d. None of the above

Answer: a.

Explanation: Mute mapping is grouping items in silence, Affinity Estimating is intended to generate conversation as items are moved into affinity groupings.

QUIZ 3	What does Wideband Delphi refer to?

a. The Oracle of Delphi

b. A technique to develop an estimate from a group of experts

c. A consensus based method of estimating

d. All of the above

QUIZ 3	What does Wideband Delphi refer to?

a. The Oracle of Delphi

b. A technique to develop an estimate from a group of experts

c. A consensus based method of estimating

d. All of the above

Answer: d.

Explanation: Wideband Delphi is a consensus based method of estimating developed from a group of experts. It's name comes from the Oracle of Delphi, a priestess from ancient Greece who provided prophecies.

Here is a quick recap of what was covered in this lesson:

- Accuracy is how close something is to a target and precision is how repeatable measurements are.
- Wideband Delphi is a process that the team can use to generate an accurate estimate.
- Affinity Estimation is a technique used to estimate (in story points) a large number of user stories.
- Team Selection, Kick-off Meeting, Individual Preparation, Estimation Session, Assembling Tasks, and Task Review are the six high level process steps in Wideband Delphi process.
- Silent Relative Sizing, Edit the Wall, Place Items into Relative Sizing Buckets, Product Owner Challenge, and Store the Data are the five steps in Affinity Estimation process.

THANK YOU