Creating a WBS

by Sophia
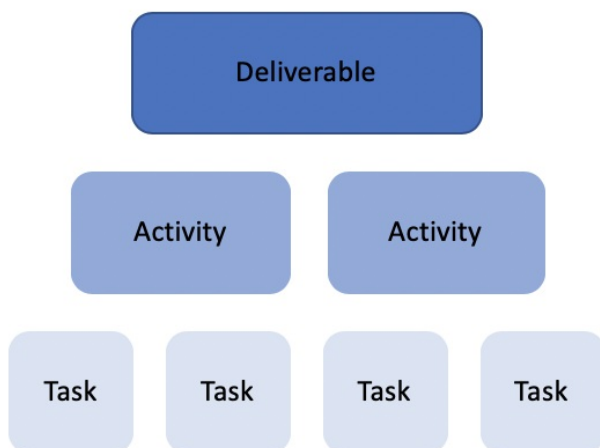
In this lesson, we'll discuss how to create a Work Breakdown Structure (WBS) by focusing on:

1. Work Breakdown Structure (WBS)

As you may know, the WBS is a method that a project manager uses to organize project work and break it down into manageable chunks.

It's the goal of the WBS to provide a complete picture of the work involved to create the project deliverables. The WBS is thus the foundation for the project schedule, resource planning, and the determination of project budget.

IN CONTEXT

You are the project manager for a house construction project. The creation of a WBS must be a collaboration between you and the members of the project team or others who have knowledge of the work.

Any individuals on the project team who have responsibility for the work toward deliverables should be involved. This includes all the trades that are part of the construction, such as those who create the structure of the house, install the roof, or place the plumbing and electrics.

Members of Project Team

Subject Matter Experts

Experienced Individuals from Similar Projects

WBS and Schedules from Similar Projects

Subject matter experts should also be involved. These are individuals with specialized knowledge that relates to the project goals or deliverables. When building an energy efficient house, subject matter experts may not work on the project, but might just provide advice that defines the work.

Any individuals who have experience with similar projects should be consulted and the project manager should review the WBS or schedules for any projects that have similar deliverables.

🚩 HINT

It would be simple to copy the WBS tasks from projects that have been completed successfully, and then modify the WBS for your specific project.

Once the project manager knows who will collaborate on the WBS, it's time to break down the work.

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2. Sticky Note Method

A WBS is often represented as a hierarchy and one method that works well to create it is called the sticky note method. In this method, each element of the WBS is written on a sticky note. These notes can then be easily moved around as more information comes in from collaborators.

This works better than a document or a whiteboard because the structure is more flexible. Since the notes can be easily moved, collaborators do not feel locked into certain workflows during the brainstorming process.

2a. Project Name

The first sticky note will have the name of the project. Let's continue with the project of building a house. So our first sticky notes may have "Dream Home" written on it to represent the name of our project.

Dream Home

2b. Deliverables

The first level of the hierarchies is **project deliverables**. While these should usually be defined in the project scope, occasionally new project deliverables will be identified during the WBS process. If new project

deliverables emerge, be sure to modify the project scope and notify the stakeholders of the change.

For the house project, the scope is taken from the house plans. Perhaps you are in charge of building a single story, 1,500 square foot ranch home.

Single-Story, 1500 Square Foot Ranch House

📄 **TERM TO KNOW**

Project Deliverables
Defined outcomes that are the focus of a project and are the basis for all project activities.

2c. Activities

The next level is **project activities**. These are the major pieces of work necessary to create the deliverables, and they are generally expressed as verbs.

For the house project, these can be listed as:

Create the Foundation

Build the External Structure

Install the Internal Systems

Each activity will then be broken down further into tasks.

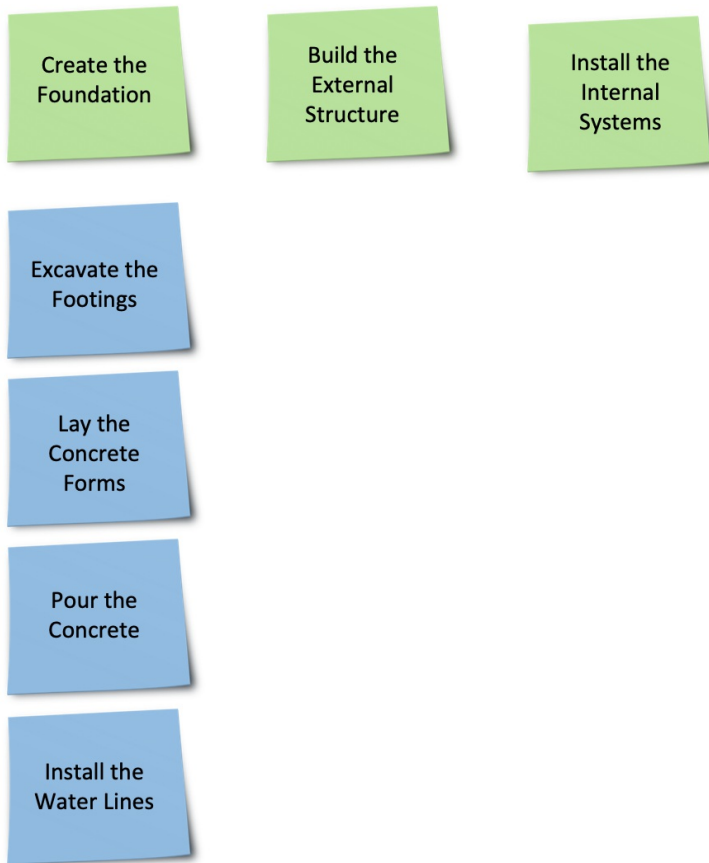📄 **TERM TO KNOW**

Project Activities
Work elements that are required to complete or manage a project.

2d. Tasks

Project tasks are the specific work needed to complete an activity. Unlike activities, however, project tasks will be assigned to the individuals performing the work.

For the house project, once the foundation activity is complete, there are corresponding tasks such as:

Create the Foundation	Build the External Structure	Install the Internal Systems

Excavate the Footings

Lay the Concrete Forms

Pour the Concrete

Install the Water Lines

This continues for each activity, breaking down the work into tasks that can be assigned.
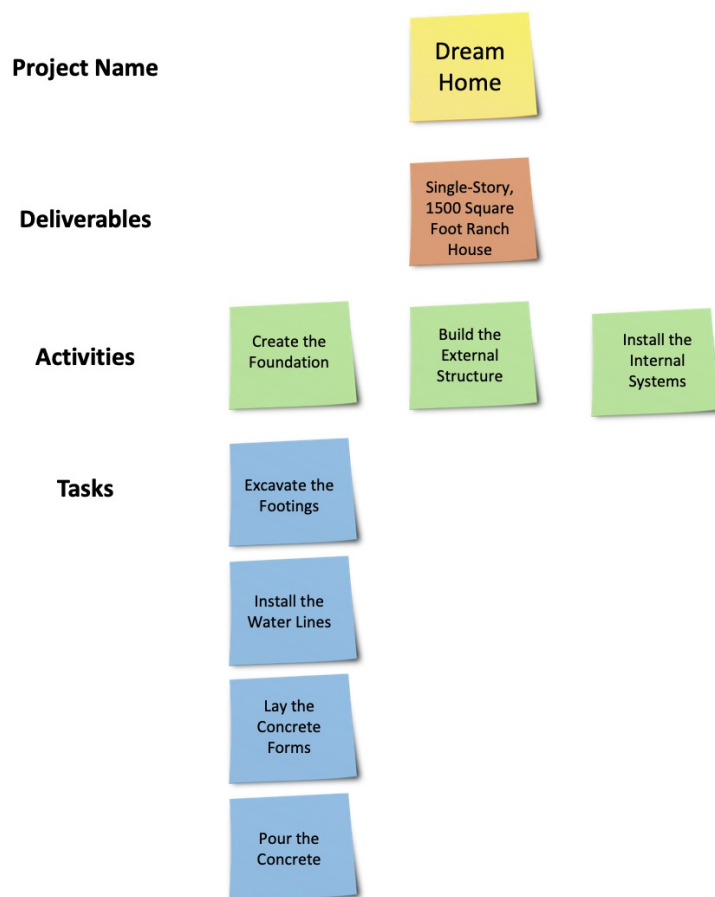
📄 **TERM TO KNOW**

Project Tasks

Discrete work that is required to complete project activities.

2e. Sequence

Once all the tasks have been identified, the proper sequence of the WBS needs to be confirmed. The WBS must represent the correct order. The sticky note method makes it easy to move these project tasks to their proper locations.

With the house project, the water lines must be installed before the concrete is poured, so this needs to be moved to the proper location.

Project Name	Dream Home
Deliverables	Single-Story, 1500 Square Foot Ranch House
Activities	Create the Foundation / Build the External Structure / Install the Internal Systems
Tasks	Excavate the Footings / Install the Water Lines / Lay the Concrete Forms / Pour the Concrete

2f. Review

The last step is to review the work breakdown structure. For any type of project, it is important to analyze and verify the work, ensure the sequence is logical for the work that is being done, and make sure nothing is missing.

📋 SUMMARY

In this lesson, you learned how to create a **Work Breakdown Structure (WBS)** using the collaboration process. You now know that the Work Breakdown Structure breaks down into **deliverables, activities,** and **tasks.** Additionally, you learned how to use the **sticky note method** during the process and how activities break down further into tasks.

📄 TERMS TO KNOW

Project Activities
Work elements that are required to complete or manage a project.

Project Deliverables
Defined outcomes that are the focus of a project and are the basis for all project activities.

Project Tasks
Discrete work that is required to complete project activities.