# Work Breakdown Structure (WBS) In Project Management

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A work breakdown structure (WBS) is a <u>project management tool</u> that takes a step-by-step approach to complete large projects with several moving pieces. By breaking down the project into smaller components, a WBS can integrate scope, cost and deliverables into a single tool. While most WBSes are deliverable-based, they can also be phase-based. Read on to learn more about what a WBS can do for your business.

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The Project Management Institute's PMBOK® Guide—Third Edition defines WBS as "a deliverable-oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverables. It organizes and defines the total scope of the project. Each descending level represents an increasingly detailed definition of the project work. The WBS is decomposed into work packages. The deliverable orientation of the hierarchy includes both internal and external deliverables."

Some commonly used terms used with WBS project management include:

- Acceptance criteria: Standards to be met to achieve customer or other stakeholder requirements
- **Budget:** Expenses associated with the project, which can be broken down by deliverables or phases
- Deliverables: The product, service or results created at various stages of the project. For instance, in a website design project, a deliverable-based WBS would be structured around deliverables such as URL, layout and written content
- Milestones: Critical stages of the project identified in the WBS
- **Phases:** The various stages of a project. For instance, in a website design project, a phase-based WBS would be structured around things like discovery, design and launch, rather than specific deliverables

• WBS: Work breakdown structure

#### **Key Characteristics and Components of the WBS**

A key component of a work breakdown structure is the 100% rule. This means that the WBS encompasses all aspects of the project, as well as the person or team responsible for that component.

Another key characteristic of WBS is its leveled structure. When applying the 100% rule, Level 1 of the WBS will be the totality of the project. Some WBSs include a description or overview of the project at the top level if it isn't self-explanatory. Then each level below breaks down the project into further detail, using the 100% rule at each level. For instance,if you're creating a WBS for a new website, Level 1 would be "Website for New Brand". Level 2 elements break down the deliverables necessary to bring the project to completion, such as secure website url, design layout and develop content. Each subsequent level continues breaking down the elements into further detail.

#### Why a WBS Is Helpful for Project Management

Work breakdown structure is a helpful project management tool for several reasons. First, it breaks down the project into bite-size components, making the project less overwhelming and more manageable.

Second, it provides a roadmap for the different individuals and teams working on the project. Many projects involve different teams moving in tandem, all of which need to coordinate and integrate for project completion. By using a WBS, the various individuals and teams can focus on their specific tasks and deliverables while also seeing how their piece fits into the project as a whole.

Finally, a WBS is an excellent tool for measuring project completion, identifying milestones and allocating budget resources. By using the 100% rule, project managers can be confident that the project is properly budgeted and that they won't run into any roadblocks due to a "surprise" deliverable.

# **How To Create and Use a WBS Effectively**

To use a work breakdown structure effectively, it is important to include all

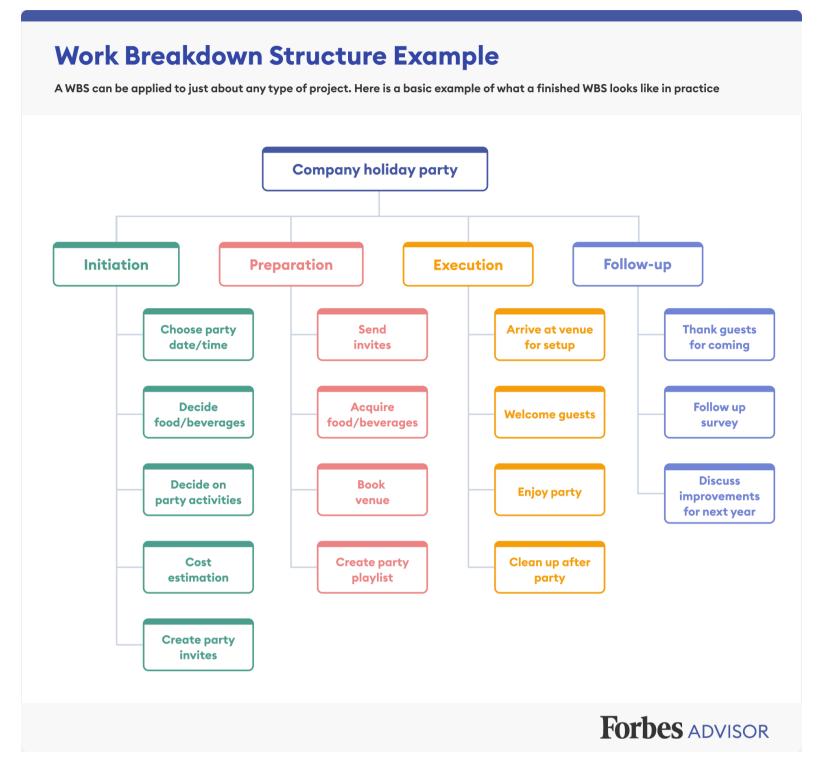
components of a project (remember that 100% rule described above) but without too much detail. Turns out, there can be too much of a good thing when it comes to the WBS.

#### To create a WBS:

- 1. Define the project. The first step in creating a work breakdown structure is to clearly establish the project. For some projects, this might be fairly straightforward. For other projects, it might require refining the actual scope of the project so that the WBS is scaled appropriately and doesn't become unwieldy.
- 2. Set project boundaries. Once the project is defined and described, you can set boundaries on what is and isn't included in the WBS.
- **3. Identify project deliverables.** This will include high-level deliverables associated with the project, such as a Project Scope Statement or Mission Statement.
- **4. Define Level 1 elements.** Remember the 100% rule while creating the Level 1 deliverables.
- **5. Break down each of the Level 1 elements.** The process of breaking down Level 1 elements is called decomposition. It consists of breaking down a task into smaller and smaller pieces, applying the 100% rule at each level. At each subsequent level, ask yourself whether further decomposition would improve project management. Continue breaking down the elements until the answer to that question is "no." When you've completed the decomposition process for each element in Level 1, the WBS is complete.
- **6. Identify team members.** Identify an individual or team who is responsible for each element.
- 7. Create a Gantt chart to accompany the WBS. A Gantt chart shows activities over time so that you can visually see information related to the schedule of the project and its various activities.

## **WBS Examples, Templates, and Tools**

If you're looking for some guidance, there are many examples, templates and software tools out there to help you create a work breakdown structure for your project. If you want to see some examples of how others have used the WBS as a project management tool, check out



If you need a little more guidance, templates might be the way to go. There are several templates available to download on <a href="Monday">Monday</a>, <a href="Monday">ProjectManager</a> and <a href="Wrike">Wrike</a>.

If you're looking for even more help with the creation of your WBS, or you need a more comprehensive and detailed WBS, a software tool might be the way to go. Platforms like WBS Schedule Pro and Microsoft Visio offer intuitive software options.

# **Frequently Asked Questions**

### What is meant by work breakdown structure?

Work breakdown structure takes a large project and, quite literally, breaks it down into smaller components. This makes it easier for teams to identify scope, cost and deliverables and delegate tasks to the team members who are best suited for the job.

# Why should project managers use a WBS?

A work breakdown structure can help project managers "see the forest

through the trees" by showing the individual components of a project in one document. It also helps project managers communicate information regarding a project budget and timeline to key stakeholders, including the individuals and teams involved in the project. Finally, by breaking down the project into smaller components, a WBS integrates scope, cost and deliverables into a single tool.

#### How can a project manager get started with a WBS?

There are several tools and software available to help you create a WBS. Monday, ProjectManager and Wrike all offer templates and tools to guide you in the process. Additionally, there are software options like WBS Schedule Pro and Microsoft Visio available if you need a more comprehensive approach.

#### Should you use a Gantt chart with WBS?

Many project managers do find that <u>Gantt charts</u> complement WBS well. They help teams to estimate the time frame of individual tasks and visualize the overall timeline of projects from start to finish.