

Lab: Build a Work Breakdown Structure (WBS) and Network Diagram

Estimated duration: 20 minutes

Objectives

- Analyze a project scenario
- Develop a Work Breakdown Structure (WBS)
- Develop a network diagram
- Compare your WBS and network diagram to a proposed solution

Prerequisites

You must have Microsoft Office or Microsoft 365 apps installed on your computer or have access to the free web version of Microsoft 365.

Scenario: Training development

Zahara Lange works for the Imperial Hotel chain. Imperial management received numerous reports of poor customer service throughout the chain. In addition, competition has increased, and marketing efforts to prevent reduced bookings are falling short. A recent presentation to partner with a major cruise company to become the hotel chain of choice fell short. The Chief Operating Officer, Zeke Matthews, recently mandated that all management-level employees attend a mandatory communication skills improvement workshop within the next three months. This training will be developed and presented internally. Zahara was just named a project manager to drive training development and execution efforts. It is currently June 1, 20XX. Zahara was given the following milestones:

- Develop a four-hour workshop by 15 July.
- Identify three qualified internal trainers to help develop the course and present it to eligible management personnel. Classes will be conducted from 8:00 AM to 12:00 PM.
- Schedule the beta course for 30 July. Present the course and gather feedback.
- Update the course based on feedback and present three more courses on August 10, 20, and 30

There are 40 managers eligible to attend this mandatory communications class. Each class will be conducted with 10 participants. Zahara worked with Zeke, breaking out the proposed project into three phases. Here are the objectives in each phase, not necessarily

in order. Review the activities and determine how they should be logically organized in the WBS.

Planning: Zeke has a goal to complete all planning by 8 July. He stated he must approve the final plan.

- Identify three subject matter experts to design, develop, and finalize the course.
- Define training objectives.
- Identify a communications style and work preferences survey to procure and include in the class.
- Manage logistics to include the selection of a venue within the chain, define IT and AV requirements, and have snacks and drinks available the morning of each course.
- Develop and share a training roster for each of the four classes.
- Develop a plan to transition management of the course to Human Resources for the August classes.
- Prepare and publish course materials to distribute on the day of the course.

Executing: Zeke wants to conduct a final course walk-through once all planning is complete and before the first class on July 15.

- Complete a final walk-through of the new course.
- Validate all beta class preparations.
- Ready the venue—ensure IT and AV are operational.
- Schedule Zeke to provide an introduction to each course.
- Distribute all course materials to participants of the beta course two days before the class.
- Conduct the beta course.
- Solicit feedback at course conclusion.
- Close out the venue.

Follow Up: Immediate and continuing actions are required after the first beta course is conducted.

- Update the course materials as required after the first beta offering.
- Analyze attendee feedback to determine potential improvements.
- Contact each attendee two weeks after the workshop to determine if the guidance provided is helping employees communicate more effectively.
- Confirm schedules for classes 2-4.
- Handoff course management to Human Resources.
- Conduct Lessons learned to determine the next steps.

Exercise 1: Develop a Work Breakdown Structure (WBS)

Based on the scenario, you will use the Microsoft Excel WBS and Network Diagram Template to develop a WBS for this project. Note that all activities in the WBS should be documented using an action-result method. For example, Develop and Share Roster, Approve Final Plan, etc. An example of a completed WBS for a meeting is included for reference and guidance.

Step 1: Keeping the CTRL key pressed, click [here](#) to view or download the **WBS Template**.

Note: On Mac systems, keep the COMMAND button pressed instead of the CTRL button.

Step 2: Enter the project name in Level 1 activity 1.0

Step 3: Break out Level 2 activities 1.1 - 3.1 as Plan, Execute, and Follow-Up. Change these headings if you wish.

Step 4: Begin with the planning activities. Determine the appropriate order for all planning activities, beginning with work packages 1.1.1, 1.1.2, etc.

Step 5: Complete all Executing activities. Determine the appropriate order for all executing activities, beginning with work packages 2.1.1, 2.1.2, etc.

Step 6: Complete all Follow-Up activities. Determine the appropriate order for all executing activities, beginning with work packages 3.1.1, 3.1.2, etc.

WBS Potential Solution

After completing the exercise, you can refer to the **WBS Solution** spreadsheet to compare the improvements listed in the document with your answers. Keeping the CTRL key pressed, click [here](#) to view or download the **WBS Solution** spreadsheet.

Note: The document will open in a new tab. Adjust your WBS before moving to the network diagram exercise.

Exercise 2: Develop a Network Diagram

Based on the scenario, you will use the Microsoft Excel Network Diagram Template to develop a network diagram for this project. This template has a brief example of the meeting project highlighted in the WBS. There are blank tabs on the template labeled Planning, Executing, and Follow-Up.

Step 1: Keeping the CTRL key pressed, click [here](#) to view or download the **Network Diagram Template**.

Step 2: Complete the planning activities. Place activities in the order you believe they should occur. If the activities can happen concurrently, show them occurring simultaneously. If there are dependencies, place the activities accordingly. Refer to the example tab for guidance. Calculate the total duration or critical path.

Step 3: Complete the Executing activities. Place activities in the order you believe they should occur. If the activities can happen concurrently, show them occurring simultaneously. If there are dependencies, place the activities accordingly. Refer to the example tab for guidance. Calculate the total duration or critical path.

Step 4: Complete the Follow-Up activities. Place activities in the order you believe they should occur. If the activities can be executed concurrently, show them occurring simultaneously. If there are dependencies, place the activities accordingly. Refer to the example tab for guidance. Calculate the total duration or critical path.

Step 5: Add up the planning, executing, and follow-up network diagrams to calculate the total time required to complete this project.

Network Diagram Potential Solution

After completing the exercise, you can refer to the **Network Diagram Solution** spreadsheet to compare the improvements listed in the document with your answers. Keeping the CTRL key pressed, click [here](#) to view or download the **Network Diagram Solution** spreadsheet.

Note 1: The document will open in a new tab. **Note 2:** On Mac systems, keep the COMMAND button pressed instead of the CTRL button.