

WBS 2.5, Adding Detail to the Bicycle WBS

by

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Assignment

Figure 4-1 of the *Practice Standard for Work Breakdown Structures* (Page 23) shows an annotated version of the WBS for a bicycle. It identifies elements 1.4 (Braking System) and 1.5 (Shifting System) as needing more decomposition. Your assignment is to add detail to this WBS as follows:

1. Add at least three level 3 elements to the braking system (i.e. 1.4.1, 1.4.2, and 1.4.3)
2. Add at least three level 3 elements to the shifting system
3. Add a new section, 1.8, for the element "Smart Phone Speaker Dock." Make sure it has at least three level 3 elements as well.
4. Use any one of the WBS formats described in Appendix D of the *Practice Standard for Work Breakdown Structures*, including:
 1. D.2 Outline View
 2. D.3 Tabular View
 3. D.4 Tree Structure View
 4. D.5 Outline View with Dictionary Elements
5. You must submit the complete WBS for this assignment, not just the changes you make.

Response

In keep with the assignment I have expanded the following Work Breakdown Structure (WBS) to meet required criteria, see Figure 1. The most difficult part was using the adjective vs verb, as state paragraph 4.2.1 of the *Practice Standard for Work Breakdown Structures Second Edition*, to describe a specific action. My observation is to format the statement as a completed process instead of a work that needs to be accomplished i.e. "adjusted Brake system." This describes a condition rather than action to meet the condition.

Figure 1 Bicycle WBS

1. Bicycle WBS
 - 1.1. Frame Set
 - 1.1.1. Frame
 - 1.1.2. Handlebar
 - 1.1.3. Fork
 - 1.1.4. Seat
 - 1.2. Crank Set
 - 1.3. Wheels
 - 1.3.1. Front Wheel

- 1.3.2. Rear Wheel
- 1.4. Braking System
 - 1.4.1. Brake cable
 - 1.4.2. Brake lever
 - 1.4.3. Brake Pad
 - 1.4.4. Adjusted Brake set
- 1.5. Shifting System
 - 1.5.1. Shift Cable
 - 1.5.2. Shift Control
 - 1.5.3. Adjusted shifter set
- 1.6. Integration
- 1.7. Project Management
- 1.8. Smartphone Docking station
 - 1.8.1. Handle bar attachment
 - 1.8.2. Multi-phone cradle
 - 1.8.3. Solar Powered Charger

Figure 1 is a modified version of the work breakdown structure from Appendix D, Project Management Institute, (2006). Practice standard for work breakdown structures, second edition. Retrieved from <http://www.pmi.org/pmbok-guide-standards/framework/practice-standard-work-breakdown-structures-2nd-edition>

Conclusion

It took concise effort for me to not use verbs in the lower level element of the WBS; but after research I see the logic in the requirement. The WBS element should define a completed process not an action to be taken.

References

Dow, W., & Taylor, B. (2008). *Project management communications Bible*. Indianapolis, IN: Wiley.