

PROJECT SCOPE MANAGEMENT

Who's Who in the Zoo?

- **Sponsor**-The person or group that provides the financial resources, in cash or kind for the *project*.
- **Project Manager**-The person assigned to achieve the project's objectives.
- **Stakeholder**-Person or organization that is actively involved in the project, or whose interests may be positive or negatively affected by execution or completion of the project.
- **Project Team**

What is Scope?

- **Scope** is the sum of the products, services, and results to be provided as a project.

How Do We Know the Scope?

- In the beginning, the Sponsor tells us what they want. This can be verbally, or through:
 - **A Project Charter**: A formal approval to begin a project.
 - **An RFP (Request for Proposals)**: A request by a sponsor to companies to suggest ways to meet the sponsor's need
 - **A Tender**: for a product or service

We Respond With...

- The **Project Scope Statement**: a description of the *project scope*, including major *deliverables*, project *objectives*, *assumptions* and *constraints*.
- The Project Scope Statement is part of the **Project Management Plan** and *signed-off* by the Sponsor and Project Manager as a way of showing their agreement.

What's a Deliverable?

- A **deliverable** is a product or services that must be produced as part of a project.
- Often a deliverable is a key part of the project.
- The Sponsor usually accepts a *deliverable* with a sign-off.

What's a Sign-off?

- We **sign-off** on a written statement or document to show that we are satisfied that the document is accurate.
- Once a document is signed-off, it is **baselined** meaning we can rely on it. A **baselined document** can only be changed by agreement of both parties.

How do we Sign-off?

- By the Project Manager and the Sponsor:
 - Signing their names to a piece of paper, or
 - By clearly agreeing to a document in an e-mail.

A Sign-off is not...

- Vague
- Confusing
- An idea
- A suggestion
- A verbal agreement
- A hand shake
- A telephone call

Which of the Following are Sign-offs?

- From: Scott
To: Mo

I received your project plan. It looks good and meets all our needs. Please proceed with the work.

- From: Scott
To: Mo

I like your idea for the project plan. I think it's a good one. You have my support.

- From: Scott
To: Mo

It was good to have you discuss your ideas over lunch yesterday. Go ahead and make it happen.



- From: Scott
To: Mo

I received your project plan. It looks good and meets all our needs except that the cost is 10% too much. Reduce the cost and then proceed with the plan.

- From: Scott
To: Mo

I showed your proposal to my boss and she likes your idea. Good job!

What is Involved in Managing Scope?

- Scope Planning
- Scope Definition
- Create the WBS
- Scope Verification
- Scope Control

Scope Planning

- We need to understand what the project will do using:
 - Documents supplied by the Sponsor
 - Project Charter
 - Request for Proposals
 - Other Documents
 - Interviews with the Sponsor and their employees
 - Planning sessions with the Project Team and the Sponsor

Scope Definition

- We develop a **detailed project scope statement**.
- This statement will be the basis for future project decisions.
- The statement allows us to estimate the cost and time for the project.
- The statement is incorporated into a **Project Management Plan**.

Defining Project Scope

Project Charter:

Upgrades may affect servers...

Preliminary Scope Statement:

Servers: If additional servers are required to support this project, they must be compatible with existing servers. If it is more economical to enhance existing servers, a detailed description of enhancements must be submitted to the CIO for approval. See current server specifications provided in Attachment 6. The CEO must approve a detailed plan describing the servers and their location at least two weeks before installation.

Project Scope Statement, Version 1:

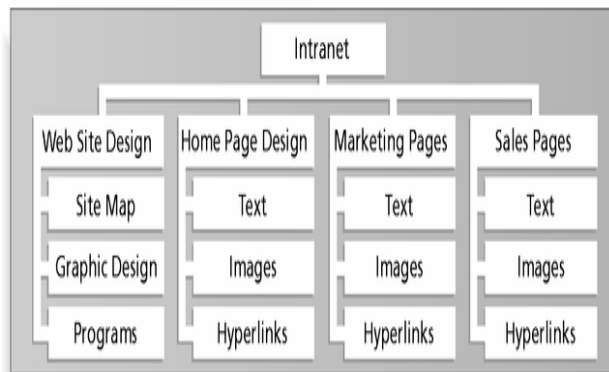
Servers: This project will require purchasing 10 new servers to support Web, network, database, application, and printing functions. Two of each type of server will be purchased and dedicated to this project. Detailed descriptions of the servers are provided in a product brochure in Appendix 8 along with a plan describing where they will be located.

Create the WBS

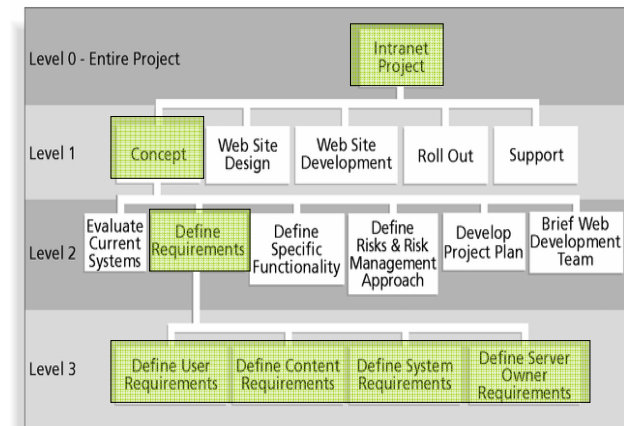
- The **Work Breakdown Structure** breaks down the major project deliverables into smaller, more manageable components.
- We need a WBS to accurately estimate project cost and time.
- We need a WBS to assign work and schedule people and resources.

- A **WBS** is a deliverable-oriented grouping of the work involved in a project that defines the total scope of the project
- WBS is a foundation document that provides the basis for planning and managing project schedules, costs, resources, and changes
- **Decomposition** is subdividing project deliverables into smaller pieces
- A **work package** is a task at the lowest level of the WBS

Three Levels of WBS



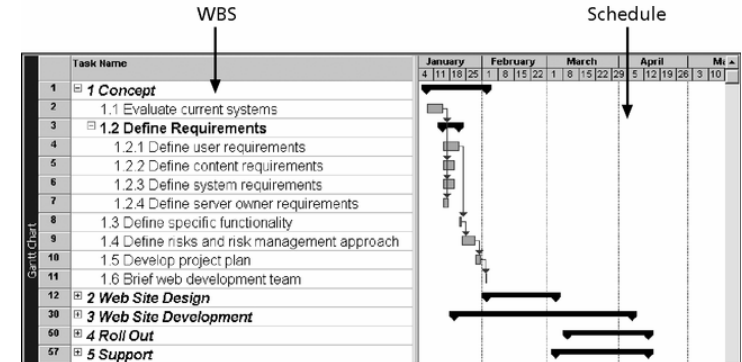
The WBS as a Chart



The WBS as a List

- 1.0 Concept
 - 1.1 Evaluate current systems
 - 1.2 Define Requirements
 - 1.2.1 Define user requirements
 - 1.2.2 Define content requirements
 - 1.2.3 Define system requirements
 - 1.2.4 Define server owner requirements
 - 1.3 Define specific functionality
 - 1.4 Define risks and risk management approach
 - 1.5 Develop project plan
 - 1.6 Brief Web development team
- 2.0 Web Site Design
- 3.0 Web Site Development
- 4.0 Roll Out
- 5.0 Support

The WBS as a Gantt Chart



WBS Dictionary

- Many WBS tasks are vague and must be explained more so people know what to do and can estimate how long it will take and what it will cost to do the work
- A **WBS dictionary** is a document that describes detailed information about each WBS item
- The approved project scope statement and its WBS and WBS dictionary form the **scope baseline**, which is used to measure performance in meeting project scope goals

Advice for Creating the WBS

- A unit of work should appear at only one place in the WBS
- You must be able to estimate a work package. If you can't estimate it, decompose it more.
- A work package must be less than a week in duration. If it is longer than a week, decompose it more.

- Project team members should be involved in developing the WBS to ensure consistency and buy-in
- **Keep the scope realistic:** Don't make projects so large that they can't be completed; break large projects down into a series of smaller ones

- **Involve users in project scope management:** Assign key users to the project team and give them ownership of requirements definition and scope verification
- Develop a good project selection process and insist that sponsors are from the user organization

- Have users on the project team in important roles
- Have regular meetings with defined agendas, and have users sign off on key deliverables presented at meetings
- Deliver something to users and sponsors on a regular basis

- Don't promise to deliver when you know you can't
- Co-locate users with developers

- **Use off-the-shelf hardware and software whenever possible:** It is nice to use the latest and greatest technology, but business needs, not technology trends, must take priority
- **Follow good project management processes:** There are well-defined processes for managing project scope and others aspects of projects

What Went Wrong?

- A project scope that is too broad and grandiose can cause severe problems
 - Scope creep and an overemphasis on technology for technology's sake resulted in the bankruptcy of a large pharmaceutical firm, Texas-based FoxMeyer Drug

- In 2001, McDonald's fast-food chain initiated a project to create an intranet that would connect its headquarters with all of its restaurants to provide detailed operational information in real time; after spending \$170 million on consultants and initial implementation planning, McDonald's realized that the project was too much to handle and terminated it.

Scope Verification

- How will we know when we have completed a deliverable?
 - Verification means we need to test our quality before giving it to the client.
 - If we have met our quality, then we ask the client to sign-off that we have completed the deliverable.
- When the project is completely done, we have the Sponsor give us a final sign-off.

Scope Control

- How can we make sure that changes to the project are within scope?
 - People sometimes suggest changes for other reasons:
 - Political
 - Giving work to a friend
 - Cheaper quality

Summary: Definitions

- Sponsor
- Stakeholders
- Scope/Project Scope
- Deliverables
- Project Scope Statement
- Sign-offs
- Baseline

Summary: Tasks in Scope Management

- Scope Planning
- Defining Scope
- Creating the WBS
- Scope Verification
- Scope Control

References

- Project Management Institute (PMI) *A Guide to the Project Management Body of Knowledge (3rd Ed.)*. Newtown Square, PA, ©2004. ISBN 978-930699-45-8
- Schwalbe, Kathy *Information Technology Project Management (4th Ed.)*. Thomson Course Technology, Canada, ©2006. ISBN 0-619-21528-3