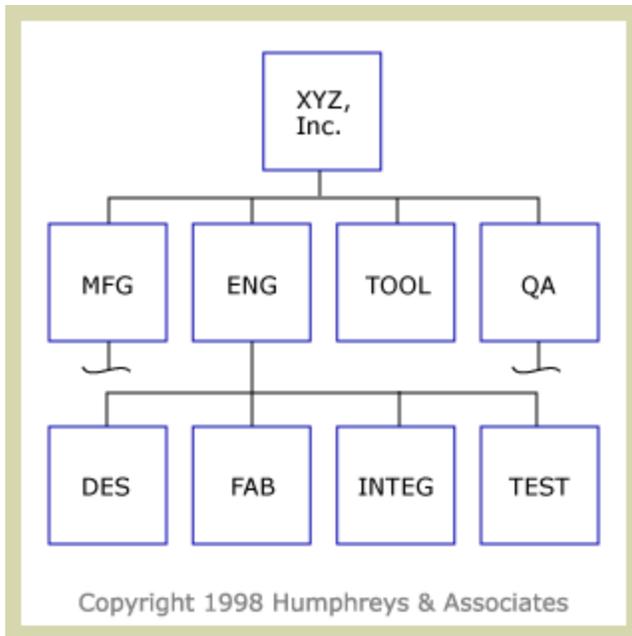## The Organization Breakdown Structure

Figure 3-1: Organization Breakdown Structure (OBS) (see next page), shows a representative OBS.

At the conclusion of this lesson you will be able to recognize the relationship between the Work Breakdown Structure (WBS), Organization Breakdown Structure (OBS) and Responsibility Assignment Matrix (RAM).

Figure 3-1: Organization Breakdown Structure (OBS)

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As the Work Breakdown Structure (WBS) identifies the work to be done, the **Organization Breakdown Structure (OBS)** identifies the people that will do the work.

Long Description

Figure 3-1: This representative Organization Breakdown Structure looks like a family tree with a block at the top representing the company XYZ Inc. This block branches down to level 2, which represents larger divisions within the parent company such as manufacturing, engineering, tooling, and quality assurance. Subsequently, each of the blocks on level 2 branches to one or more blocks in level 3. These blocks represent smaller departments within the organization. For instance, design, fabrication, integration, and testing might all be departments contained in the engineering division.

Determining Appropriate Levels of Breakdown

The OBS and WBS must be brought together before work plans can be formulated, schedules prepared and budgets allocated. The biggest challenge is determining the appropriate levels of work and organizational breakdown at which to effect this integration because a management control point will be created that, to a large extent, will determine the cost and efficiency of the management system.

For example, if the WBS is driven to a very low level of indenture and the OBS establishes management responsibility at a low organizational level, the marriage of the two structures can result in an extremely detailed management control system with excessive documentation and administrative processes. On the other hand, bringing the two structures together at too gross a level can result in a management system that is too loose; i.e., work elements may be too large, complex and ill-defined, and organizational responsibilities may not be well focused. Consequently, baseline discipline can be difficult to maintain due to the lack of work definition and the amount of replanning flexibility available within assigned areas of responsibility.

Ways to Organize

As previously mentioned, work planning is an iterative process; thus, finding the "right" levels of work definition and organizational responsibility may require several iterations of the WBS and OBS that consider such factors as work scope, complexity, volume, cost, time duration, span of organization control, and other factors. Identifying the appropriate level is a "judgment call" that is based on experience with other projects and knowledge of what has worked and what has not worked in the past.

Companies organize differently for different projects. A very large project that dominates the business may foster an organizational structure that mirrors the project with virtually everyone reporting to the project manager. Many companies, though, have numerous projects that draw on established functional organizations through a matrix approach. Recently, more and more companies are moving into an environment that employs multifunctional work teams for work management and performance as opposed to traditional functional organizations. Regardless of how the organization is structured, responsibility for work must eventually be assigned, resources must be allocated and individuals held accountable for its accomplishment.

Figure 3-2: Responsibility Assignment Matrix (RAM)

The assignment of responsibility occurs where work team involvement with a WBS element is identified. This point is often referred to as the control account or cost account level. **Figure 3-2** illustrates the integration of the WBS with the OBS to form control accounts. See RAM example.

RAM Example

Example from a Software Development Program
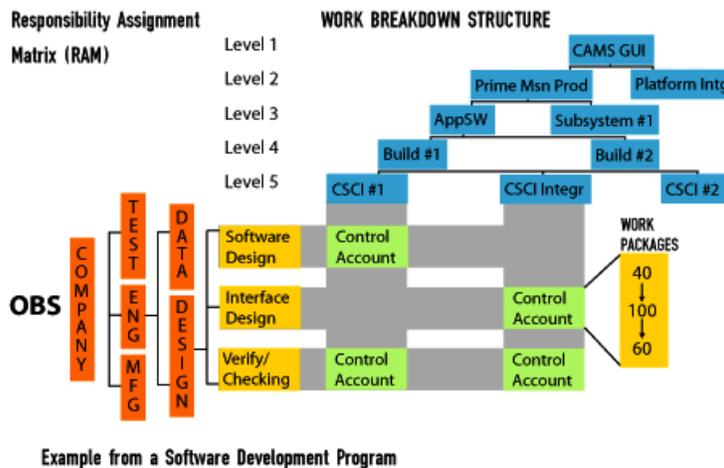
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Long Description

This matrix is an example from a Software Development Program. The Responsibility Assignment Matrix (RAM) shows the intersection of the Organizational Breakdown Structure (OBS) and the Work Breakdown Structure (WBS). One example is as follows: The OBS breaks down to Engineering which breaks down to Design which breaks down to Interface Design. The WBS breaks down to CAMS GUI which breaks down to Prime Msn Product which breaks down to AppSW which breaks down to CSCI integration. The intersection of these two paths produces a Control Account and Work Package.

Control Account

Control Account (per EIA-748) - A management control point at which budgets (resource plans) and actual costs are accumulated and compared to earned value for management control purposes. A control account is a natural management point for planning and control since it represents the work assigned to one responsible organizational element on one program WBS element.

Control Accounts for Large Projects

A definition for a control account could be that it represents one organization's effort on one WBS element. Control accounts can occur at various levels (but always below the lowest elements in the WBS) since the WBS indenture stops at whatever level represents a "manageable unit of work." Obviously, large, complex tasks require more levels of indenture than do supporting elements.

For any given leg of the WBS, management must decide what constitutes a sufficient breakdown of the work. The same logic pertains to the OBS since some tasks can be managed at higher organizational levels than others. The objective is to establish enough control accounts to ensure good planning and control discipline and visibility, but not so many that the system becomes overly cumbersome and costly to operate.

Determining the Size of Control Accounts

 A general rule of thumb applicable to the size of control accounts on a large project is that the time required for that work should run about a year in duration. The rationale for that concept is based on the tradeoff between baseline discipline and management flexibility. The control account manager normally has the authority to replan work within the framework of the control account schedule and budget. This flexibility can only be provided within limits and the one-year guideline seems to be a logical constraint in most environments. Without such a guideline, some other limitation on replanning may be necessary to preclude situations where budgets planned for downstream work are used to cover today's problems, sometimes referred to as the "rubber baseline" problem. Dollar amount and work complexity may also affect the size of control accounts.

It may not be possible or practical to plan the entire project to the control account level at the outset. In such cases, planning may be carried only to an intermediate WBS level until more detail planning can be accomplished. The primary consideration is that work must be planned in enough detail to ensure that adequate resources are reserved for that work. If all of the work cannot be defined, it is not possible to establish a realistic baseline for the entire project and near-term work may consume more than its fair share of the project budget before that fact becomes apparent.

Organizing for the Program Knowledge Review

What is the relationship of the level of the intersection of the OBS and WBS - the RAM - and the resulting impact to the number of Control Accounts?

◉ The objective is to establish enough Control Accounts to ensure good planning and control discipline and visibility, but not so many that the system becomes overly cumbersome and costly to operate.

○ The objective is to establish all the Control Accounts at the same level to ensure good planning and control discipline and visibility to avoid an overly cumbersome and costly to operate system.

○ The objective is to establish management units of work for large complex tasks at higher levels of indenture to avoid excessive administrative costs for supporting cost and schedule elements.

○ The objective is to bring the OBS and WBS together at a gross level to avoid excessive administrative work, yet avoid creating organizational responsibilities that are not well focused.

Correct. The relationship between OBS and WBS is to establish enough Control Accounts to ensure good planning and control discipline and visibility, but not so many that the system becomes overly cumbersome and costly to operate.

End of Lesson

You must click the **Next** button in order to receive credit for this lesson.