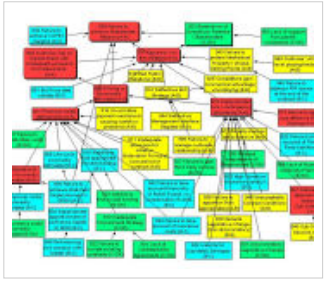
Creating a Work Breakdown Structure (WBS)

By Tony Jacowski



The successful implementation of any Six Sigma project depends on the ability of Six Sigma professionals such as black belts to break down a large project into smaller manageable sub-projects. This breaking down of mammoth projects into several smaller projects is technically referred to as work-breakdown structure (WBS).

The fact that Six Sigma projects need to be manageable in size is evident from past records, which indicate that most of the Six Sigma projects that were successfully implemented were neither too small nor too large. Most Six Sigma projects are large, having multiple aims and objectives. However, their chances of success are limited as long as they are not broken down into smaller sub-projects using the WBS approach.

The WBS Approach

The main function of a WBS is to provide black belts with the necessary tools and techniques that will allow the breakage without compromising with the goals and objectives of the project. WBS concentrates on achieving results that can be easily integrated with the results of other smaller sub-projects. WBS also provides for problem-free breakage of work schedules and targets without having to expend extra resources on hiring new Six Sigma professionals or investing in new systems and technologies. This way, companies are able to utilise their existing resources to their fullest, while getting the benefits of Six Sigma projects at the same time.

The WBS Process

The WBS process starts with defining the nature and scope of various sub-projects and how they are interrelated to each other. However, achieving this is often not easy because it is quite complex and a little mistake on part of the black belt can severely affect the successful implementation of the project. The standard breaking-down process is achieved by employing Six Sigma tools and methodologies such as decompositions and integrations. For example, suppose a software company has undertaken the development of a data related software program.

In this case, the software company will use Six Sigma tools to decompose client requirements into specific engineering requirements. If the client has requested for a program that will covert data into X-bar chart, the request will be decomposed into smaller engineering requirements such as the logic or formula for computing ranges and plotting data points. After this, the next step will involve integration, which in this case would be developing an interface that will link various smaller modules for producing the X-bar chart and displaying it on the screen.

Dealing with Project Deliverables

All Six Sigma projects have to deal with project deliverables, which are clearly specified in the mission statement by project sponsors. However, measuring and tracking of deliverables is often too difficult and unless they are broken down into smaller packages, it will be quite impossible to obtain cost and time estimates for each deliverable. By utilising WBS, deliverables as defined in mission statement can be broken down into smaller manageable components.

After working on each deliverables separately, each of them can be integrated together without affecting the basic nature of these deliverables as defined during the start of the project.

The basic aim of WBS is to ensure the successful implementation of a large Six Sigma project. Although standard WBS tools are available, black belts can also use their creativity and experience for breaking large projects into smaller sub-projects. Whatever be the procedure employed, one thing is certain that without WBS, none of the large Six Sigma projects would have ever been successfully implemented.

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