Project Scope Management

When completing an assignment, the first question that comes to mind is *what is the scope of the assignment*? The scope determines the extent to which a student is expected to respond. It tells the student what is entailed. Without knowing the scope of an assignment, a student cannot perform well on that assignment. In the same way, a project cannot succeed unless its scope is clearly defined and known to those who are involved in the project.

One of the major reasons for project failure is not clearly defining the project scope. Defining the scope is the first step. If we falter on this step, we cannot expect the following steps to rectify this mistake. Scope refers to not just the products, but to the associated process of developing those products as well. The scope should clearly indicate the contents of a project, what is included and what is not included. It should document the common understanding between the stakeholders and those who implement the project.

Scope management involves different steps, such as initiation, planning, definition, verification, and change control. Initiation is the step of committing to complete a project. With it, the project comes into existence and the project charter provides an outline and a general description of the project. Scope planning establishes a basis for further actions and decisions. Scope definition takes the planning phase to the next level of breaking down the work into manageable components, known as work breakdown structures or WBSs. Scope verification is intended to review and formally accept the project as laid out in the definition. Finally, change control ensures that any change to the already agreed upon scope is managed in a formal way.

To identify potential projects, one must start with the strategic plan, which will identify the main business areas. If a project is supportive of the main business objectives, it is a prime candidate. Furthermore, if a project will bring in high return on investment, it is an attractive project. Similarly, each project must be analyzed in terms of its support for the overall business objectives of a firm, the project's viability, timeliness, and its payback. Project proposals may arise internally or may be the result of explicit business needs. Either way, each proposal must be evaluated based on the current business situation.

There are several methods for selecting projects. One common method is to evaluate a project against an organization's business needs. How important is the project to the success of the organization? Is there sufficient funding to complete the project? Will management commit the resources for the proposed project? The answers to these questions will help us determine if a

project is worthy of selection.

We can also select a project if it is going to solve a business problem. Often, such changes are proposed as enhancements to existing systems. Another scheme is to seize an opportunity. For example, businesses can supplement sales with Internet sales. Projects may also be required as a result of regulations, corporate policies, or changes in standards.

Net present value analysis or NPV calculates the net gain or loss from future business expenses and profits. If NPV is not positive, the project is not worth considering. When projects are prioritized, the projects with higher NPVs should be given higher priority.

Return on investment or ROI is quoted as a percentage by taking the business income and dividing it by the investment. Most organizations have a set minimum ROI for project selections. Projects with higher ROI are given higher priority.

Payback analysis calculates the time it takes to get to positive cash flow taking into consideration the cumulative costs and benefits associated with a project. The earlier the payback happens, the better. In other words, short payback periods are preferable when selecting projects.

This is the technique often used by many organizations for selecting projects. Here, a model is created with different factors that are important to the organization. Each factor, such as support for a business objective, customer support, and NPV is given a weight. The total of these weights should equal 100. Then for each project an estimated value is assigned and the projects with higher weighted scores are given higher priority.

A project charter formalizes a project and sets the project goals and objectives. Information contained in this document includes project title, initial scope and responsibilities, authorization, and date of authorization.

The scope statement may include project justification, products or services included in the project, project deliverables, and criteria for evaluating the success of the project.

Work breakdown structure is a mechanism to break down the whole project into manageable work units. It may be depicted as a tree, a table, or any other suitable format to identify the work groups and their components. It

may be organized by product, project phases, or a combination of products and phases. No matter what format is used, it is the basis for project schedule, cost analysis, implementation, and change control.

Projects can become unwieldy if the scope is left unchecked. It is very important for the success of a project to make sure that the scope definition is accurate and only contains what the project charter proposes. It is also necessary to check changes to the scope. When a change becomes necessary, it must be reviewed and authorized via formal methods.

The success of a project depends heavily on our ability to define the project scope as clearly and accurately as possible. The scope should be well documented, reviewed, and approved by the stakeholders. Future changes to the originally accepted project scope must be thoroughly investigated, their consequences determined, and the changes approved through proper change control mechanisms.