Outcomes-based Project Scoping and Design

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SYNOPSIS

Poor planning is often cited as one of the major causes for projects failing to be completed successfully (on brief, on budget and on time). The team members often complain that the specifications for what they had to accomplish were vague and incomplete.

Although we know that the achievement of any objective requires specific actions I believe that the underlying cause for these problems are that we move to action-oriented planning too soon when planning projects. The outcomes-based approach to project planning spend a significant amount of the planning effort on specifying the final and intermediate outcomes that must be achieved before finally specifying the actions / tasks that must be completed to achieve these outcomes.

INTRODUCTION

Many projects fail to be completed on brief, on budget and on time. As part of implementing improvements to their project management processes I start of by asking participants in implementation workshops why they believe projects so often fail to meet one or more of the criteria for successfully completing a project.

The reasons given generally fall into three categories:

- The uncertainty (technical or the environment in which the project is executed) inherent in projects as the cause for many projects failing to be completed on brief, on time and within budget.
- Poor project plans resulting unrealistic promises being made and vague specifications of what it is that project must achieve.

In this presentation I will address planning aspects as a means to improve the successful completion of projects.
Outcomes-based project scoping and design starts with and focuses a lot of the planning effort on specifying the final objective of a project, and the intermediate objectives that must be achieved on the way to achieving the final objective, in verifiable outcomes in stead of actions. We all know that work gets accomplished through actions. So why not simply state the plan of actions (typically the project network presented in the form of a PERT or Gantt Chart). There are three main problems associated with action-based project planning processes:

- It is very easy for a group of people, such clients and service providers during proposal stage to agree on a particular course of action while holding very different, and often unstated, assumptions on what the outcomes of the actions they agreed upon would result in. The same applies for project team members during detail planning stage,
- Specifying actions too early in the process forecloses the consideration of alternative ways of achieving a particular outcome. Typical examples are specify actions such as to develop something (alternative is to purchase it) or to recruit someone with a particular skill (alternative outsource the work).
- If we are dealing with a large and complex project it is often difficult to come up with a complete list of all the required actions and to specify the dependencies between them without some framework to use a roadmap.

The outcomes-based project scoping and design methodology briefly described below deals with each of these typical problems.

**OUTCOMES-BASED SCOPING AND DESIGN**

The scoping and design process is conducted in five simple steps, namely:

**Step 1: State the target of the project as an outcome**

**Step 2. Determine the obstacles**

**Step 3. Determine the intermediate objectives**

**Step 4: Develop the IO map**

**Step 5: Develop the network of tasks**

Each of these are described briefly below:

**Step 1: State the Target of the Project as a Verifiable Outcome**

Define the target and the scope of the project as a verifiable outcome or set of outcomes. State the targets of projects as the RESULT or the NEW REALITY that has to be achieved (not as your actions to achieve it). State the target in the present or past tense. Be specific about **WHAT** has to be achieved, **BY WHEN** it has to be achieved and **WHO** will be the beneficiaries of the outcome. Start by writing three headings (questions) on a piece of paper and providing the required information:
• Who will be impacted by / experience / benefit from the outcome (not the people executing the project)? Be specific by naming a specific individual / group. Do not specify vague constituencies such as “the people of South Africa”.

• What will they experience? Imagine that the project is now successfully completed and you have to brief an independent auditor that must go verify your claim that the project achieved its objectives. What should the auditor be able to find?

• By when will these outcomes exist – be specific at least month and year?

Typical examples of before and after:

• Develop a MIS for reporting on utilisation of resources in each department by different project portfolios.
• The Director of Resources use a MIS (developed by your project) to obtain information on the utilisation of resources from each departments by each project portfolio.

Note that although the difference in wording may be subtle the implications for what needs to be delivered by the project are profound!

**Step 2: List the Obstacles / Hurdles that Prevent the Objective from being Achieved**

An obstacle is simply something which exists in the current reality and blocks us from achieving the target of the project right here and now. The purpose of raising the obstacles to achieving the target of the project is to ensure that we address:

• ALL the issues we need to address in order to achieve the target;
• Limit our efforts to addressing only those issues we need to address in order to achieve the target.

To continue with the MIS example, an obstacle may be “The Director of Resources’ management information requirements are not known” and another one could be “a mechanism for capturing input data does not exist”.

**Step 3: For Each Obstacle / Hurdle state and Intermediate Objective (IO)**

State IOs (intermediate objectives) as the RESULT or the NEW REALITY that has to be achieved to overcome an obstacle (not as your actions to achieve it). State the IO in the present or past tense. Be specific about what has to be achieved. State the when and who will be impacted only if it is relevant.
To continue with the MIS example, the IO’s for the obstacles could be:

- The IO for “The Director of Resources’ requirements are not known” could be “A user requirement specification exists which spells out what information, at what level of detail and at what frequency is required by the Director of Resources”

- The IO for “a mechanism for capturing input data does not exist” could be “the data input module from the existing XYZ application is used for capturing the required input data”.

**Step 5: Sequence the Intermediate Objectives (IOs)**

Use an intuitive approach making use of using "Post-its” or any other means of sticking pieces of paper on a large surface. Start by writing the target or objective of the project on the top of a large piece of paper or a surface that you can draw lines on. Then follow the steps below:

1. Write IOs on Post-its
2. Take one IO and stick it in the middle of a big page (surface)
3. Take another IO and check the following:
   - Do I have to achieve it (the IO in my hand) before the IO already on the surface? - If so stick it below the one already on the board
   - Do I / can I achieve it (the IO in my hand) only after the IO already on the surface has been achieved? - If so stick the one in your hand above the one already on the board
   OR
   - I can’t see any connection between the two IOs? - Stick the IO in your hand next to the one already on the surface.
4. Take another IO and repeat the process of steps 3 and 4. Move IOs as needed.
5. When you have finished positioning all the IOs review the map and make changes where needed.
6. If you are stuck and not sure about the sequence, check the corresponding obstacle to determine the sequence.
7. Check that all the entry IOs do not depend on any IOs above them. This means you must be satisfied that you can achieve the entry IO right away. If this not the case - check the sequence and bring the blocking IO to below the IO in question.
8. Do a final check that the necessary requirements, in other words that the IOs feeding into one IO above them are sufficient it.
Step 5: Specify the Actions / Tasks

Using the IO map as the framework:

- Define the tasks that need to be completed in order to achieve each of the IOs on the IO map;

- For each task, determine the resources required, estimate the duration of the task and estimate the cost of completing the task.

- Organise the tasks in a network on the basis of start-finish relationships between the different tasks.

CONCLUSIONS

The outcomes-based project scoping and design methodology outlined above have proven to be a simple but robust method for developing valid project plans in many different environments. It was exhaustively tested in proved to be a highly effective in R&D, IT development and Government policy development and implementation environments. With proper facilitation it works well as a scoping and design process in teams of up to 20 to 30 people.