



# **PROJECT MANAGEMENT PRINCIPLES AND TECHNIQUES: How to plan and manage a special project from start to finish**

**A General Learning Climates, Inc. Workshop Handout  
for  
Project Team Leaders and Members**

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## STEPS IN PROJECT MANAGEMENT

The following ten steps will provide guidelines for how to manage special complicated projects. Each step is named and defined and additional considerations are offered to provide guidance.

### 1. DEVELOP A STATEMENT OF PROJECT MISSION AND GOALS

This is the most complicated and critical step in the entire process. It determines all that will follow. To accomplish this step some background information must first be established.

#### **Background information**

- a) **Problem:** What problems or issues caused the project to be identified as necessary in the first place? Who identified the problems? How long have the problems existed? Who are the stakeholders in the problem?
- b) **Authority:** Who is responsible for authorizing the project? How much authority will the project manager have to implement the project? Has the authorization of the project included specific parameters with limited flexibility or has the project manager been given wide latitude for action? What other authorities or stakeholders are implicated in the project? What authorizations are required from them before proceeding?
- c) **Expectations:** What outcomes are expected from the project by those authorizing it? Are there outcomes that are expected but cannot be made explicit (e.g. political outcomes)?
- d) **Resources:** What resources will be allocated to the project in the form of personnel, schedule, equipment, and budget? What informal alliances must be built in order to secure the required resources for the project? What priority must the project be given for success? How will the work that was previously scheduled be rearranged for project members to proceed? What deadlines, if any, drive the priority of the project? What are the implications if a deadline is missed (i.e. is there any flexibility in the deadlines)? Is the ultimate project deadline realistic? Can an unrealistic deadline be renegotiated prior to beginning the project?
- e) **Reports:** Who will need to know what and by when as the project is implemented?

With the background information as a base, the project mission statement should be written down along with any specific goals that are associated with achieving the mission.

#### **Statement of Project Mission and Goals**

A project mission statement should be brief, no more than one short paragraph, summing up the purposes that the project is to fulfill. The project goals should fit within the context of the mission and specify outcomes that are required to fulfill the mission. It may be useful to write down the project goals first and then sum them up in a project mission statement.

After writing out the mission and goals, check them with those authorizing the project to be sure the project is accurately understood and clearly approved as to direction and outcomes.

### 2. SELECT AND ORIENT PROJECT TEAM

Selecting the project team is among the most important tasks of the project manager. Its importance is made crucial because, more often than not, it is problems among the members of the project team that cause difficulties in the project implementation rather than technical concerns. Considerations that may be useful as guidelines for selecting project team members include these:

**Selecting project team members**

- a) **Track record of cooperation** - Every team project member must be willing and able to perform in a cooperative manner with all other team members in support of the project mission and goals. It takes only one team member who is competitive with others (e.g. grabbing resources, hogging credit, dominating decision processes, refusing to support the work of others, etc.) to force the project manager and all other team members into equally competitive positions to protect themselves. Once this dynamic begins, it is extremely difficult to prevent the team and the project from coming unraveled and to fail in fulfilling the mission. Select only team members who have demonstrated a willingness to cooperate with others on behalf of a common goal. If at all possible, avoid selecting team members, no matter how technically or politically attractive they may be, who will, or might, sabotage the team's ability to work together cooperatively.
- b) **Relevant abilities** - Select the fewest number of project team members possible while also covering all of the required resources needed in the team. Prefer one team member who brings several desired resources and qualities to the team over having to add multiple members to get the resources needed.
- c) **Appropriate authorizations** - Secure authorizations for selecting project team members from their direct supervisors and any others who may have a stake in their members' participation. Ascertain that participation in the project team will result in a gain for team members (e.g. commendation for extra performance on annual review) and will in no way cause the members harm (e.g. put them at risk with their regular supervisor, cost them bonus money, etc.)

Once the team has been selected, they must be oriented to the special work involved in the project. The project manager must remember that the project team members have typically had none of the background and preparation that has been described in the paragraphs above. It is also critical to remember that, if project team members are to be able to cooperate fully in implementing the project, they must have all the information available to them about the entire project. Therefore, the orientation should address the points given below:

**Orientation of the project team**

- a) **Background information** - share all of the information secured previously that gave rise to the project in the first place (e.g. review the answers to all of the questions raised under step number one above.)
- b) **Mission and goals** - a full explanation and interpretation of the project mission and goals is essential to all project team members. Check to be sure all team members understand the implications of the mission and goal statements for their role in the team.
- c) **Team operations** - explain how the team will function, when and where it will meet, how meetings will be organized and managed, how communications and coordination issues will be handled, and what the expectations are of team members concerning team performance.
- d) **Answer all questions** - provide opportunity for members to ask their questions and get answers.

### 3. SPECIFY KEY PROJECT MILESTONES

After a full discussion and interpretation of the project mission and goals, involve the team members in a process of identifying key milestones by which progress can be measured. Milestones may include the arrival of certain critical dates, completion of certain agreements with key providers or leaders, release of certain information to the public, announcement of certain accomplishments, attainment of certain resources or budget approval, etc. Milestones do not include every activity or event associated with the project, only those achievements that indicate the project is making measurable progress.

To help identify milestones, it is useful for the project team to look at the project from both a “wide-angle” perspective and a “telephoto” perspective. All project team members must be able to think as if they had a zoom lens in their brains. From the wide-angle perspective, the team looks at the big picture to discern major project phases (e.g. start-up, research and development, contract and agreement building, implementation, report preparation). With the framework of phases in mind, the team looks at the more detailed activities that are associated with each phase to search for and identify key milestones.

Another perspective that is useful in identifying milestones is to use a “backwards-planning” perspective. For example, what if the project were now finished and you were at the completion deadline? What would have to have happened by what dates? By what dates would each of the major project phases have to have been accomplished if the total project is to be completed on schedule? What events or accomplishments and their dates are the most critical to the success of the project? These may be project milestones.

Check to see if there are any overlapping milestones for the project that duplicate events, land on the same date, etc., and select the most important item as the milestone to measure progress.

### 4. BRAINSTORM PROJECT ACTION ITEMS OR EVENTS

Involve project team members in a process of brainstorming all the steps, events, activities, actions, etc., that must be taken to complete the project. Record the brainstorming ideas onto flip charts for all to see. These ideas will be stimulated by the milestone structure of the project but should not be limited by that thinking. Encourage creative thinking while brainstorming. Let team members make silly connections among project steps, identify outrageous actions that could interfere with project success. Record all ideas onto flip charts. If a detail is identified that doesn't fit neatly anywhere, record it for later use. Apply the rules of brainstorming:

#### **Brainstorming rules**

- There is no such thing as a bad idea.
- The wilder and more outrageous the idea, the better.
- Use one person's idea as a springboard for another.
- No one owns an idea; all ideas are team property.
- Build on each others ideas; use no negative judgments.
- Every idea is recorded onto the flip chart as nearly as possible to the original words.
- Brainstorming lasts for a defined period of time (e.g. 15-20 minutes for each brainstorming period) after which the ideas are sifted and sorted into those that can actually be used and those that will be dropped.

## 5. ASSIGN PRIORITIES TO ACTIONS

Use the brainstorming ideas to review and revise the project milestones as appropriate. Determine priorities for project actions according to these suggested criteria:

**Criteria for priorities** - To what degree will an action *contribute directly* to:

- the core project mission and goals;
- the ability to meet the project deadline or a milestone deadline;
- the most beneficial use of project resources;
- the effectiveness of the project team;
- the ability of this project's success to contribute to that of another project.

Identify project actions according to multiple levels of priority with those contributing the most according to the list of criteria above as 1. High; 2. Moderate; 3. Low. Use these assignments of priority as the basis for allocating time and resources.

Identify “critical path” actions or those that are critical to achieving other project steps or achieving project overall success. Examples of such critical actions include: securing legal permits, engaging contract services, completing the arrangements for a program, freezing the specifications of articles to be produced, releasing publications through the mail or other distribution channels, securing the required funding, acquiring required personnel, etc.

## 6. LOGICALLY SEQUENCE ACTION ITEMS AND ALLOCATE RESPONSIBILITIES

### **Sequence items**

Recapitulate all of the project action items into sequentially ordered list taking into account both priority and what actions come before others. Indicate priority with different printing or colors.

### **Allocate responsibilities**

Specify who will be responsible for each of the action items associated with the project. Secure their agreement to assume these responsibilities. Indicate the name or initials on each action item for which individuals have agreed to assume responsibility.

Ask each team member to add up their responsibilities and determine the reasonableness of the load as compared to other team members and their other organizational responsibilities. Have them check with their supervisor to confirm authorization to continue with the project team now that their responsibilities have become more clearly specified.

## 7. SCHEDULE AND CHART ACTION ITEMS

Using the sequenced list of action items, allocate each item to a point in time on a schedule, calendar, or project chart. A popular chart format to show sequenced actions according to a time line is a Gantt Chart. This chart format visually displays actions, the responsible persons, and the start and end times (duration) for each action. To see some examples of Gantt charts, simply enter the words “Gantt Charts” into an Internet search engine such as Google and visit several of the sites that are identified.

Once the project activities have been charted all the information necessary for performance accountability is now public. Every member of the project team can refer to the chart to see clearly

what needs to be done, by whom, and by when. Team meetings are used to track progress toward goals, coordinate actions, and shift around resources as necessary for timely success.

## 8. COORDINATE IMPLEMENTATION ACTIVITIES

Now that all of the planning is completed, it may be wise to share the detailed and charted project plans with those who authorized the project and, once again, secure their reaffirmation of the project direction and plans. After all are satisfied that everything is approved, “just do it.”

### **Maintain project team communication**

Hold team meetings and otherwise communicate to assure that all of the actions steps are happening as scheduled and agreed. Maintain constant contact among project team members and between team members and the project planning charts, priorities, milestones, and goals. Keep a written record of project progress and problems.

### **Update schedule, chart, responsibilities**

As slippage occurs in planning (some slippage is almost inevitable), update the project schedules and charts to reflect actual events and times. It is urgent that project implementation information be kept credible if it is to be used effectively to maintain team performance and assure individual accountability.

### **Reallocate resources as required**

Check for unanticipated impediments and obstacles. Identify blockages and either reallocate resources to overcome them and stay on schedule or change the schedule agreements. Check “down stream” for any implications resulting from adjustments that have been made in resources and scheduling. Stay alert for team members that may have to leave the team and be replaced with new members. Every time this happens, the information and planning cycle starts from scratch (selection, etc.) for the new member.

## 9. COMPLETION OF PROJECT

*“A funny thing happened on the way to completing the project.”*

**Postponement of the project** - Sometimes projects get postponed. It happens for a lot of different reasons: priority changes, budget reductions, leadership shifts, etc. If it happens to your project, first check to see what the reason is for the postponement, then see if you can influence getting the project back on track. A lot of time and energy has been invested by the entire project team. It’s worth some struggle, therefore, to see if the momentum of the project can be maintained. Make a progress report to the powers-that-be and state your case for why the project is worth continuing. Maybe they just lost track of how important the project was and needed a reminder. If successful, everyone on the team can receive a jolt of motivation to see it through to completion. If postponement prevails, go through an orderly shutdown of the project with the team. Communicate the postponement to all of the project stakeholders; tie off the loose ends of contracts and agreements; determine how the project can be restarted most effectively and set it up for such a restart at a later time. Often much of the planning work can be used later by replacing onto a new calendar. Leave written recommendations for a new project manager.

Prepare for the completion of the project by using these guidelines.

**Project completion** - Involve all project team members in the summing up of the project.

- Involve them in validating and approving all of the project information, findings, decisions, agreements, purchases, allocations, recommendations and other outcomes relating to the project mission and goals.
- Use the written record of project progress as the basis for formulating the project report. Avoid using this record, however, as the report itself. It is far too detailed and disorganized for anyone who has not been on the project team to understand easily.
- Decide what you want the project report to accomplish. Identify the audience that your report must speak to effectively. Determine the form and format of the report (written and published, verbal presentation in a meeting, videotaped report for public presentation, etc.)
- Organize the project report according to the priorities of outcomes that were achieved. Provide only the information that is necessary for the report's audience to understand and appreciate what the project has achieved. Make no more than a handful of key points about the project.
- Clearly identify what you want the audience to do, what action should be taken, etc., in light of the project's outcomes and the report's conclusions.

## 10. EVALUATION OF THE PROJECT MANAGEMENT PROCESS

After the project is complete, request that project team members fill out a project management evaluation survey to capture their perceptions of how well the project was managed from their different perspectives. Three questions that can be used are: What went well in the project? What went poorly? What changes would they make? Also, be sure to ask them for feedback concerning their own satisfaction level with their participation in the project. Then, celebrate!

This paper is developed as a handout to support an interactive workshop for Project Leaders and Project Team members that has been designed and facilitated by Dr. David Hartl, President of General Learning Climates, Inc. To contact Dr. Hartl to schedule a Project Management Workshop for your organization, please visit [www.davidhartl.com](http://www.davidhartl.com) and navigate to the "Contact" page for information.