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Managing Project Teams

CERTIFIED PRACTICING PROJECT MANAGER TRAINING MODULE

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TABLE OF CONTENT

LIST OF PICTURS

LIST OF TABLES

INTRODUCTION

Scope

A successful project requires the project team to participate in the planning process, buy into the project plan, and accept responsibility for completion of assignments. It is important to have a defined formal structure for the project and the project staff. Eighty-one percent of Fortune 500 companies are building at least partially team-based organizations and at least 77% use temporary project teams to perform core work.

The Project Team members may change as the project moves through its various phases. Assessing and selecting people who have the requisite skills for each phase of a project is critical to its overall success. The skills should be explicitly identified as a part of the project planning process.

Acquiring the project team is often complicated by the fact that the project management team will not usually have direct control over everyone they would like to have involved in the project. Successful project teams develop a culture and a management style that fits the project environment. Project teams must decide at the outset how they will deal with stakeholders, handle problems, and respond to emergencies or unexpected events.

Success scenarios provide a way for project teams to develop ideas about their culture and philosophy of operation. However, the team must formalize its thinking and define a specific management style and way of doing business. The team should develop a modus operandi that describes its philosophy, values, vision, and mission.

How project team performance will be managed is described by a plan and states how they aim to develop such productivity by using open and effective communication, developing trust among team members, managing conflicts in a constructive manner, and encouraging collaborative problem-solving and decision-making.

General Considerations

Every project has a project team. The project team consists of every person who works on a project, including employees, consultants, contractors, and resource agencies. Project team members are responsible for delivering products with the quality promised, in a timely and cost effective manner. Each team member is an internal customer for some deliverables and a supplier of other deliverables.
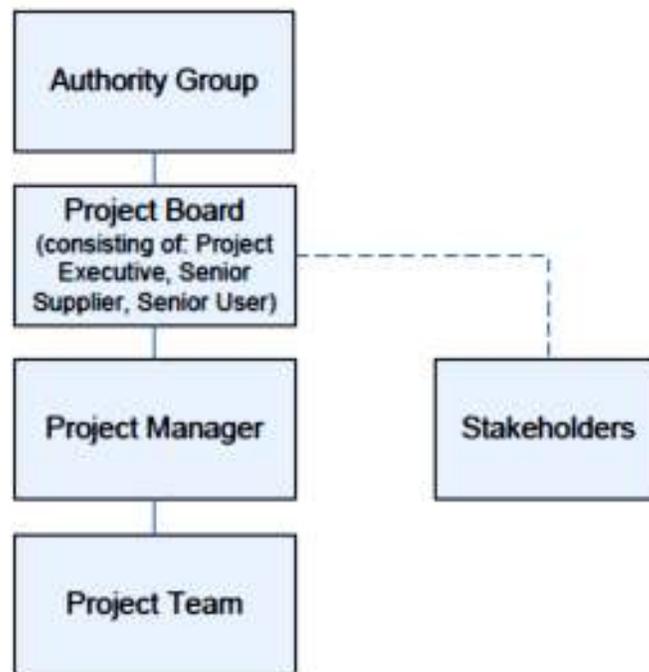
Figure 1: Project management structure

An increasing number of companies are using business teams to respond quickly to changing conditions in an environment of intense global competition and increasing complexity. Changing an organization to compete in a highly volatile business environment usually requires multiple and continuous innovations to improve information flow, optimize synergies, and streamline work.

A team can be defined as a group of people organized to work together to achieve a goal. Teams can be collocated, meaning they are in the same physical location and team

members have the opportunity for face-to-face interactions on a regular basis. A project is "a unique venture with a beginning and an end, undertaken by people to meet established goals with defined constraints of time, resources, and quality.

Some unique attributes of projects include:

- projects are never identical in implementation,

- have varying end results,

- have different personalities, and

- have problems that are unpredictable.

The project team controls, influences, or reacts/responds to needs and situations by engaging in both hard and soft activities. In hard activities, the team controls, influences, or reacts/responds to project requirements by managing resources, applying practices or standards, or doing more or less work (scope of work). The team can also control, influence, or react/respond to project requirements through soft activities. That is, the team can seek to shape opinions and attitudes and modify behaviors through training, team building, advertising, promotion, and community relations.

Teams can outperform individual team members in several situations. The effort and time invested in developing a team and the work of the team are large investments of project resources, and the payback is critical to project success. Determining when a team is needed and then chartering and supporting the development and work of the team is another critical project management ability.

Teams are effective in several project situations:

- When no one person has the knowledge, skills, and abilities to either understand or solve the problem

- When a commitment to the solution is needed by large portions of the project team

- When the problem and solution cross project functions

- When innovation is required

A positive team experiences come from:

- Using individual personal abilities to enhance the entire team's effectiveness.

- Knowing that being on a good team isn't random. Rather, it is a function of one's relationship behavior and what you and others do.

- Taking personal responsibility for the quality of relationships and team outcomes.

A successful project requires the project team to participate in the planning process, buy into the project plan, and accept responsibility for completion of assignments. It is important to have a defined formal structure for the project and the project staff. This provides each individual with a clear understanding of the authority given and responsibility necessary for the successful completion of project activities. Project team members need to be accountable for effective performance of their assignments.

Within a Project Team there may be a number of project officers, senior project officers and, depending on the size and complexity of the project, one or more team leaders. The Project Team members may change as the project moves through its various phases. Assessing and selecting people who have the requisite skills for each phase of a project is critical to its overall success. The skills should be explicitly identified as a part of the project planning process.

It is not unusual for a Project Team to be appointed on the basis of availability rather than the specific skills required to undertake the project. Ideally, the Project Team should include at least one person with an intimate knowledge of the business area, and preferably more. It may also be an advantage if one or more Project Team members are novices or inexperienced in the business area, so that fundamental issues are not overlooked or simply taken for granted.

The required mix for any project team includes the following individuals:

- People specifically charged with execution of the project solution. Regardless of how a project is organized, there are roles and responsibilities that should be considered for every IT project. These include responsibilities like the following:
  - ✓ Data/database administration
  - ✓ Project management
  - ✓ Data communications
  - ✓ Coding, scripting, configuration

- ✓ System testing
- ✓ Conversion
- ✓ Documentation (user and technical)
- ✓ Training
- ✓ System architecture
- ✓ Help Desk

- Users who interface with the system, provide system input information, or depend on system outputs (either from within or outside of the organization).
- Project owner.

It can be a challenge to find the right combination of people with project management, technical and business area skills, let alone people who are able to function effectively as a team for any length of time.

Issues to consider include:

- balancing the project's skill requirements against the skill set of staff who are appointed to the project. This can provide significant development opportunities if staff are open to acquiring new skills;

- providing appropriate staff training and development early. This will ensure the project's initial skill requirements are met and can serve to integrate the Project Team;

- providing an environment of continuous improvement for the Project Team. This means budgeting for training and development over the life of the project as skill requirements change and individual skills develop and their capabilities increase;

- maintaining staff performance and morale, including providing supportive feedback on performance. This can be challenging if the project is experiencing problems, delays or negative feedback from stakeholders;

- creating the desired cultural environment within the Project Team's physical environment. This takes time, effort and involvement; and

- integrating contractors and consultants within the team, which may require a different approach.

In order to manage projects effectively and increase the chances for a project's success, it is important to employ a methodology for completing the project. Project management focuses "the responsibility, authority, and scheduling of the project in order to meet defined goals. Basically, project management results in better control and coordination while reducing development time, lowering costs, and generally producing higher quality results. It forces team members to both consider what needs to be done to achieve project goals and work out how activities can be coordinated while considering possible risks and trying to mitigate them.

The Project Team is led by the Project Manager, working for the successful delivery of the Project Outputs as outlined in the Project Business Plan and elaborated in the Project Execution Plan (or Project Work Plan or Work Breakdown Structure) or other implementation plans. Under the direction of the Project Manager, the project team is jointly specific responsibilities of the Project Team include:

- Assist the Resource Team with the formulation and evaluation of alternatives to address problems and opportunities.

- Recommending preferred alternative to the shareholders.

- Identify and clarify regulatory requirements and permitting.

- Review/comment on key project documents.

- Assisting with the formulation of operating/monitoring plans.

- Helping assess project stages and resources required

- Generating ideas and options

- Analyzing options and costs

- Identifying risks, solutions and detailed contingency plans

- Checking and reviewing quality

- Completing assigned tasks

- Translating defined deliverables into detailed specifications

- Writing and assembling training materials and documentation

- Reporting progress and issues to the Project Manager

- Working with customers, colleagues and other key personnel to achieve deliverables

- Communicating clearly and in good time with all relevant parties

- Assisting with user training and operational handover

- Identifying snags at the end of the project

- Contributing to project planning processes

Project Team members are also responsible for adhering to the process established by the Facilitator/Process Manager, reviewing materials provided and asking questions if necessary. The project team may be formally or informally organized, depending on the complexity of the project. Individual team members may be active or inactive as a project progresses through the project lifecycle. The project team typically performs the following activities:

- Ensure design of a quality project that can be safely and efficiently constructed and maintained within scope and budget and on schedule.

- Participate in a reevaluation of preliminary engineering data and system planning recommendations to confirm that the study should continue.

- Determine logical project limits.

- Determine the need for participation of local, regional, State or Federal agency members, or the need for advisory committees.

- Recommend studies, timetables, alternatives, type of environmental document, and the feasibility of mitigation measures.

- Call upon various disciplines as needed to ensure thorough analysis of the social, economic, environmental and engineering aspects of the project.

- Initiate community involvement to obtain project consent and help plan public meetings and hearings.

- Ensure that State and Federal requirements are met.

- Recommend a preferred alternative to shareholders.

- Ensure that right of way is acquired and cleared on schedule.

- Provide advice during construction.

- Ensure that the project history is preserved.

- Ensure that post construction mitigation is completed before project close out.

- Ensure that excess property efforts are completed before project close out.

Success scenarios provide a way for project teams to develop ideas about their culture and philosophy of operation. However, the team must formalize its thinking and define a specific management style and way of doing business. The team should develop a modus operandi that describes its philosophy, values, vision, and mission. This document is broader in scope than the typical project management manual. The modus operandi is the charter that guides the development of the project team and its policies, procedures, and systems throughout the life of the project.

Types of Teams

Every team member has a natural team-player style. All of these styles are important ingredients of successful teams. It is important for a team to understand the team player styles of its members. This helps to highlight both strengths and weaknesses. And if a player style is missing, then the team can talk about how to fill this gap (Kennedy and Wilson, 2008).

1. Contributor. This member gets the team to focus on the immediate task.

   - Enjoys providing good technical information and data.

   - Pushes for high performance standards.

   - Helps the team use its time and resources.

   - Freely shares all relevant information with the team.

2. Collaborator. This team player emphasizes the overall purpose of the team.

   - Helps the team establish goals and clarify tasks.

   - Sees the "Big Picture."

   - Reminds the team to stay on track and focused on the target.

   - Pitches in to help out other team members when needed.

   - Flexible and open to new ideas.

3. Communicator. This member encourages positive interpersonal relations and group processes.

   - Emphasizes team process.

   - Believes in an interpersonal "glue".

   - Listens well and periodically summarizes discussion.

   - Encourages everyone to participate.

   - Helps team members relax and have fun.

4. Challenger. This style asks the tough questions and pushes the team to take reasonable risks.

   - Questions goals and methods.

   - Willing to disagree with the leader.

   - Encourages the team to take well-conceived risks.

   - Honest about progress and problems.

   - Asks "why?" and 'how?" and other relevant questions.

<u>Functional Teams</u>

A functional team refers to the team approach related to the project functions. The engineering team, the procurement team, and the project controls team are examples of functional teams within the project. On a project with a low complexity profile that includes low technological challenges, good team member experience, and a clear scope of work, the project manager can utilize well-defined functional teams with clear expectations, direction, and strong vertical communication.

<u>Cross-Functional Teams</u>

Cross-functional teams address issues and work processes that include two or more of the functional teams. The team members are selected to bring their functional expertise to addressing project opportunities.

Problem-Solving Teams

Problem-solving teams are assigned to address specific issues that arise during the life of the project. The project leadership includes members that have the expertise to address the problem. The team is chartered to address that problem and then disband.

Managing Project Teams

Acquiring the project team is often complicated by the fact that the project management team will not usually have direct control over everyone they would like to have involved in the project. They may need to negotiate with others who are in a position to provide the right number of individuals with the appropriate level of knowledge skills and experience. Projects require specialized resources with the skills, competencies and experience to fill a variety of critical roles. Equally important to determining which skills and how much experience is needed for project roles is the requirement to fill those roles with resources that actually possess those skills and competencies.

The project management team is usually a subset of the project team and is responsible for the project management and leadership activities such as initiating, planning, executing, monitoring & controlling, and closing the various project phases. The number of people assigned to the project may change as the project progresses, particularly when people are needed for their particular technical expertise.

The project team should be assigned to the project as early as possible so that they can take some part in the planning process. Even though team members are not responsible for planning as such, many of them will have specific expertise that can help to make the initial estimates more accurate (Newton, 2015).

Most of the project members operate under a dual authority system—they report to their own line manager as well as the project manager. The project manager should ensure the communication channels between he and the line managers are effective and must be addressed in the communications management plan. Appreciating that the line managers' priorities are often going to be different to those of the project will help project manager when discussing the availability of resources. If not handled properly, this has the potential for conflict and confusion, which will inevitably lead to a decrease in performance

Project Development Team

A PDT is an interdisciplinary team composed of key members of the project team and selected external stakeholders. PDT members:

- Advise and assist the project manager in directing the course of studies

- Make recommendations to the project manager and management

- Responsible to carry out the project work plan

- Participate in major meetings, public hearings, and community involvement

- Oversee the execution of the early components of the project activities, culminating in project approval

The PDT continues to address significant project issues that may arise during any component of the project lifecycle. On large or complex capital projects, the PDT uses a formalized approach to obtaining stakeholder input. These projects usually involve one or more of the following – for example a new freeway project:

- Significant new right of way area

- Route adoption by the government

- Work on access controlled facilities requiring a new or revised Freeway Agreement

- Substantial increase in capacity

During the early components of a project, the PDT formally solicits project stakeholder input into the planning, development, and evaluation of the various project alternatives. This is primarily due to the fact that on a PDT, external stakeholders are given an active role in solving their problems.

The Winning Team

To build an effective team, project leaders should decide who is on the team, the scope of their responsibilities, and the policies, procedures, and systems they will use to get the job done. team building is not a once-and-done exercise, but a process that continues throughout the life of the project. A discussion of the major steps in building a winning team follows (Dinsmore, 1993).

Step 1: Conceptualize the Winning Team

The goal is to design a team that is well suited to the demands of the project environment. These demands are defined by:

- the stakeholders' success criteria,

- project environmental factors,

- potential risks and unknowns,

- resource constraints,

- management support and commitment, and

- the difficulty of the project itself.

The output of Step 1 is a specification that defines the structure and character of the project team. Initially, this specification is used to identify potential team members. Later, the specification helps guide the actual formation and development of the team.

Step 2: Follow the Phases of Team Building

Successful team building is an integrated process that continues throughout the life of the project. The intensity of the team building is high during the early stages; however, it must persist through all phases of the project. Every success or failure is an opportunity to strengthen the team. The team-building phases include:

- project simulation,

- project conditioning, and

- team maturing.

For the project team, success means having to satisfy everyone else whenever possible. The project team tries to strike a balance between conflicting stakeholder goals, project goals, and the resources available. The process for ensuring project success is as follows:

- Define the success objectives for the project stakeholders in quantitative and/or qualitative terms.

- Determine how to measure accomplishment of the stakeholders' goals.

- Collect data, then measure and evaluate the results.

- Take corrective action as needed.

To control a project, the team must collect data on how work is progressing. Data collection and analysis is straightforward for conventional cost, schedule, and technical objectives. However, for subjective goals the problem requires a different approach. Data are collected on these items by:

- having a third party query the stakeholder,

- establishing stakeholder feedback procedures,

- using survey and sampling techniques, and

- observing stakeholders' reactions to project conditions

DEFINITIONS

Brainstorming - a method of idea generation used in teams to "storm" a topic with brain power, resulting in many new and different ideas

Conflict - a serious disagreement over needs or goals.

Consensus planning - A plan reached through group discussion tends to yield a program that is well thought through, with a high probability of being implemented

Creativity sessions - Techniques for boosting creativity include brainstorming, brain writing, random working, checklists, and word associations.

Cross-functional team - The team who address issues and work processes that include two or more of the functional teams.

Flowchart - a pictorial representation of all the steps, activities, and tasks in a process

Functional team - The team who approach related to the project functions.

Passive member - team members who come to meetings but don't participate in discussions or volunteer for tasks.

Parallel virtual teams - teams that "carry out special assignments, tasks, or functions that the regular organization does not want or is not equipped to perform.

Pareto Chart - a bar graph that summarizes quantifiable information. It is used to compare quantities

Project - "a unique venture with a beginning and an end, undertaken by people to meet established goals with defined constraints of time, resources, and quality. a project has a beginning and an end.
project development team - an interdisciplinary team composed of key members of the project team and selected external stakeholders.

Relationship conflict - conflict due to interpersonal incompatibilities between team members such as annoyance and animosity

Task conflict - conflict that occurs when members convey divergent ideas and opinions about specific aspects related to task accomplishment

Team - a group of people organized to work together to achieve a goal

Team conflict - serious disagreements over needs or goals among team members

Team effectiveness - the capacity a team has to accomplish the goals or objectives administered by an authorized personnel or the organization.

Virtual project team - a project team that includes members who are working together on a specific project where team member's tasks are nonroutine, and the results are specific and measurable