

Software Project Management

18BIT65S

UNIT IV

Managing Teams: Leading the team –Establishing the Project Authority–Mechanic soft Leading a Team –Team Meetings–Maintaining Team Leadership –Working toward the Finish –Motivating The Team. Implementing the Project Plan: Reviewing Assignments with the project Team – Focus on the work – Hosting a project Team Meeting–Tracking Process–Tracking Financial Obligations.

TEXT BOOK: JOSEPH PHILIPS, “IT PROJECT MANAGEMENT”,THIRD EDITION, TMH, NEW DELHI, 2012

-Dr.P.Radha

Managing Teams

Leading the Team

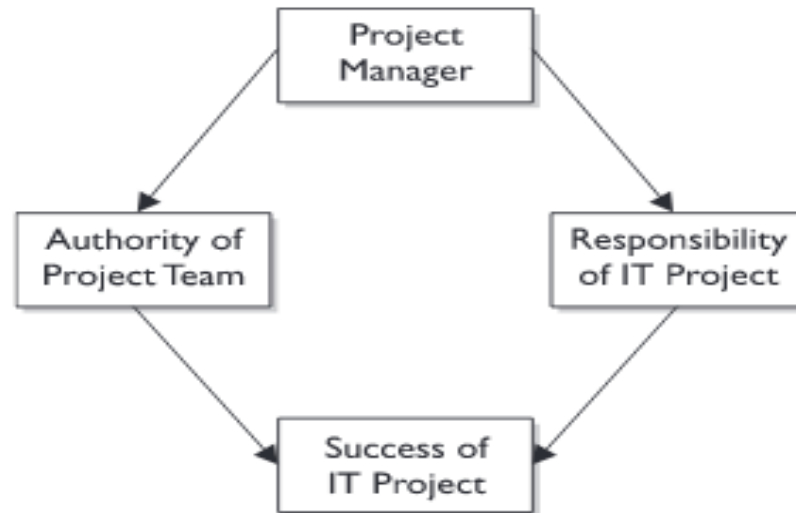
- To lead the team, a project manager must first act like a leader
- The easiest and most direct path to making others develop a passion for your project is for you yourself to develop a passion for the project.
- Passion for the deliverable, excitement, and zeal for the success of the project is contagious.

Cont...

- A project manager who wants to lead the project team has to care not only for the success of the project, but also for the success of the individuals on the team.

Establishing the Project Authority

- With any project, regardless of the size, the project manager must establish his authority over that project. Authority over the project is not the same as authority over the project team members.
- A project manager must have authority in proportion to responsibility



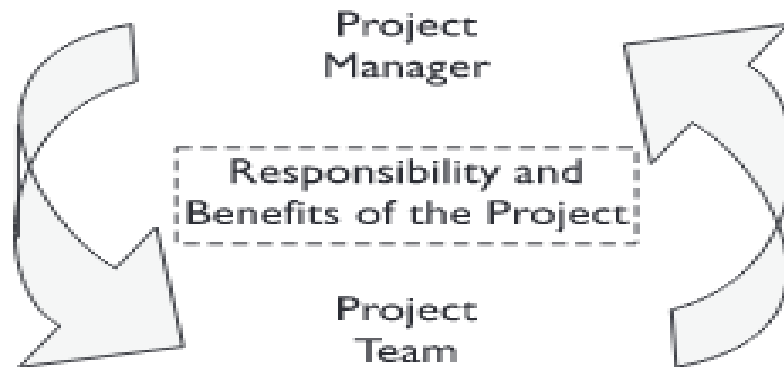
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- Authority and responsibility are bound together in project management
- The project manager's career, opportunity for advancement, and reputation all rest on the ability of the project team to finish the project and create the deliverables.
- The authority of a project manager, in any organizational structure, must be leveraged with the respect of the project team.

- Team members must agree that you are the leader of the project and that they will support your decisions, your management of the resources, and your approach to managing the project.
- The project manager, though not the manager of the individual team members, still must exude a level of confidence and authority over the project team to gain their respect and desire to work on the project.

Cont...

The relationship between the project team and the project manager must be mutually beneficial .



Cont...

Many IT project managers stem from IT backgrounds.

For these individuals to be successful, they must possess the following attributes:

- Organizational skills
- Passion for the team's success
- Passion for the project's success
- Ability to work with people
- Good listening skills
- Ability to be decent and civil
- Ability to act professionally
- Commitment to quality
- Dedication to finish the project

Mechanics of Leading a Team

- One of the best methods you can use to lead a team is to emulate the leaders you admire.
- By mimicking the actions of successful leaders, you will be on your way to being successful too.
- Much of your ability to lead will come from experience and maturity.
- There are, however, certain procedures and protocols of project management that you must know to be successful.

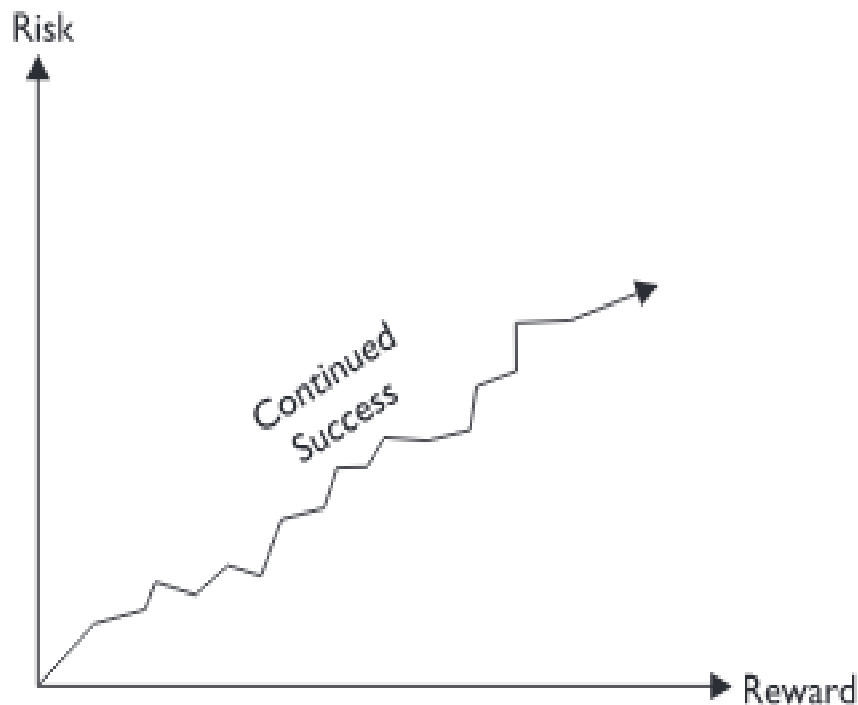
Mechanics of Leading a Team

Decision Making

- A project manager can lead the team through these decisions utilizing the talents, experience, and education of each team member to come to a conclusion.
- To facilitate the discussion, the project manager may use three types of decision-making processes to arrive at a solution:
 - **Directive**
 - **Participative**
 - **Consultative**

Cont...

- Project managers must balance risk and reward to be successful.



Cont...

Directive

- The project manager makes the decision with little or no input from the project team.
- Directive decision making is acceptable, and needed, in some instances, but it isolates the project manager from the project team.

Cont...

Participative

- In this model, all team members contribute to the discussion and decision process.
- This method is ideal for major decisions such as the process to roll out an operating system, design a new application, or develop a web solution for an organization.

Consultative

- This approach combines the best of both preceding decision-making processes.
- The project team meets with the project manager, and together they may arrive at several viable solutions.
- The project manager can then take the proposed solutions and make a decision based on what she thinks is best for the project.
- This approach is ideal when dealing with projects under tight deadlines, restrictive budgets, and complex technology.

Working with Team Members

- Evaders
- Aggressives
- Thinkers
- Idealists

Cont...

Evaders

- These team members don't like confrontation on any level.
- These team members may be new to the company, shy, or intimidated by out spoken team members—including the project manager.
- When using the participative method to arrive at a decision, everyone's input is needed—including from these people.

- To get these individuals involved, try these techniques:
- Have each team member offer an opinion on the topic, then write the suggestion on a whiteboard
- If possible, allow team members to think about the problem and then e-mail their proposed solution to you.
- Call directly on the evader team members first when asking for suggestions.

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Aggressives-

- These team members love to argue.
- Their opinions are usually in opposition of the popular opinion, they are brash in their comments, and they are typically smarter than anyone else on the project team—at least they think they are.

Cont...

To deal with these folks, try the following methods:

- Allow these team members to make their recommendation first before taking suggestions from other team members.
- Ask them to explain their position in clear, precise reasoning.
- If necessary, speak with them in private and ask for their cooperation when searching for a solution

Cont...

Thinkers

- These team members are sages.
- They are usually quiet through much of the decision-making process, and then they offer their opinion based on what's been discussed.
- These team members are excellent to have on the project team, though sometimes their suggestions stem from other team members' input.

Cont...

Idealists

- These team members, while their intentions are good, may see the project as a simple, straight path to completion.
- They may ignore, or not be aware of, the process to arrive at the proper conclusion.
- Often idealists are well trained in the technology but have little practical experience in the implementation.
- These team members are usually open to learning and eager to offer solutions to the project

Team Meetings

- A project manager who wants to lead an effective team must be organized, prepared, and committed to a strict timetable.
- When you meet with your team members, they will be looking to you to lead the meeting in an organized, efficient manner.
- Decide at the onset of the project how often the team should meet to discuss the project
- Depending on your project, a weekly meeting may be required; in other circumstances, a biweekly meeting is acceptable.

Meeting Frequency

- Decide at the onset of the project how often the team should meet to discuss the project. Depending on your project, a weekly meeting may be required; in other circumstances, a biweekly meeting is acceptable.
- The point is to decide how often the team needs to meet as a group to discuss the project as a whole and then stick to that schedule.
- The project meeting schedule should be documented in the communications management plan.

Meeting Purpose

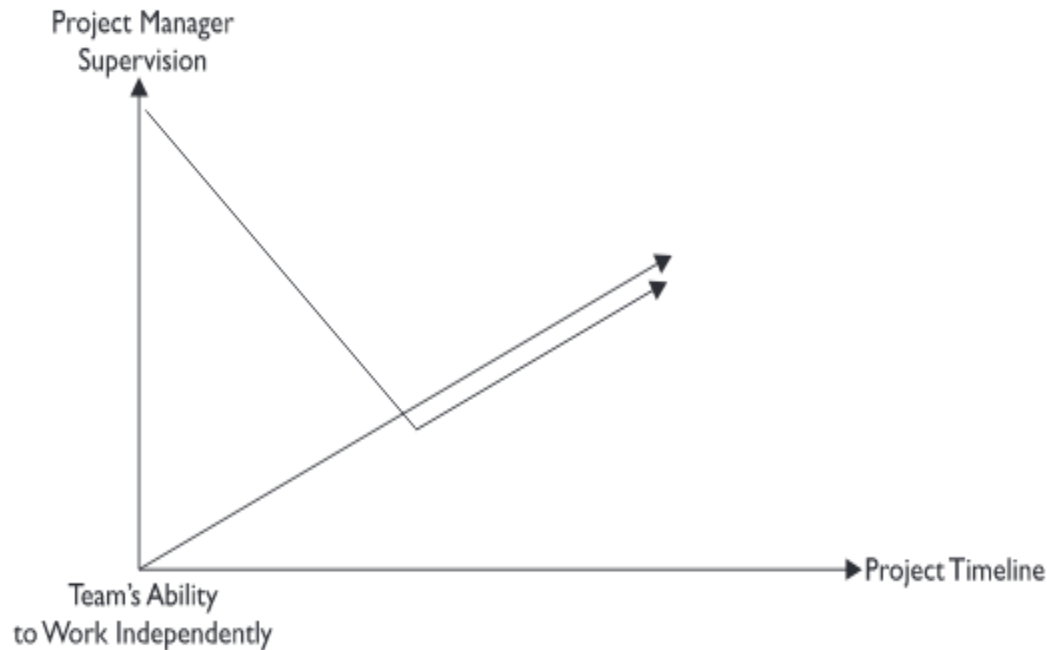
- Review of tasks completed
- Review of upcoming tasks
- Risks and pending risks
- Recognition of team members' achievements
- Review of outstanding issues on the project
- News about the project

Using a Meeting Coordinator

- Agreement to maintain the position throughout the project
- Willingness to learn and speak before the project team
- Organization skills
- Time management abilities
- Commitment to gathering resources needed for the meeting

Maintaining Team Leadership

- Projects require the project manager's constant attention.



Background and Experience

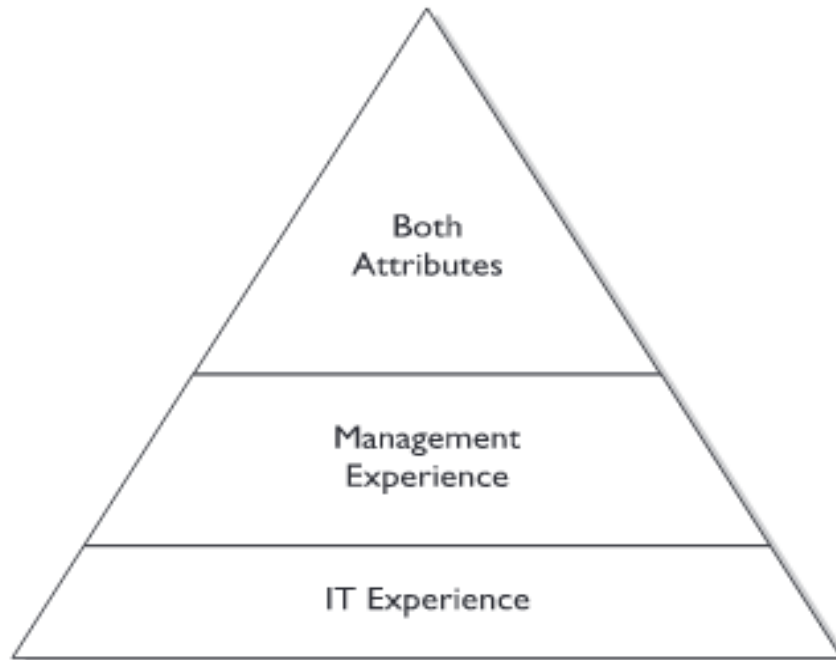
- When it comes to information technology, experience means practically everything .
- An IT project manager may see project management as a logical segue into a management position with a company—and certainly it can be.
- But to be a great IT project manager, you need experience within the technology sector.
- By relating personally to the technology, you gain a level of respect not only from the project team but also from management.

Cont...

- Your experience in the IT field will allow your guiding hand to nudge the project back into alignment with the project's goals.
- Some IT professionals, however, may be lacking in the interpersonal skills, tact, and charm that is sometimes required to motivate and lead a group of individuals

Background and Experience

- Managerial and technical experience is necessary for IT project managers.



Working Toward the Finish

- A project requires many things: finances, hardware, time, and other resources.
- Chief among the required resources is a commitment from all parties involved in the project.
- This includes the project manager, management, the project sponsor, and the project team.
- You will need to create and maintain a relationship with each of these parties to ensure their continued support of the project and their commitment to seeing the project through. Project managers who isolate parties that are not actively involved with the implementation are doing their project and career a disservice

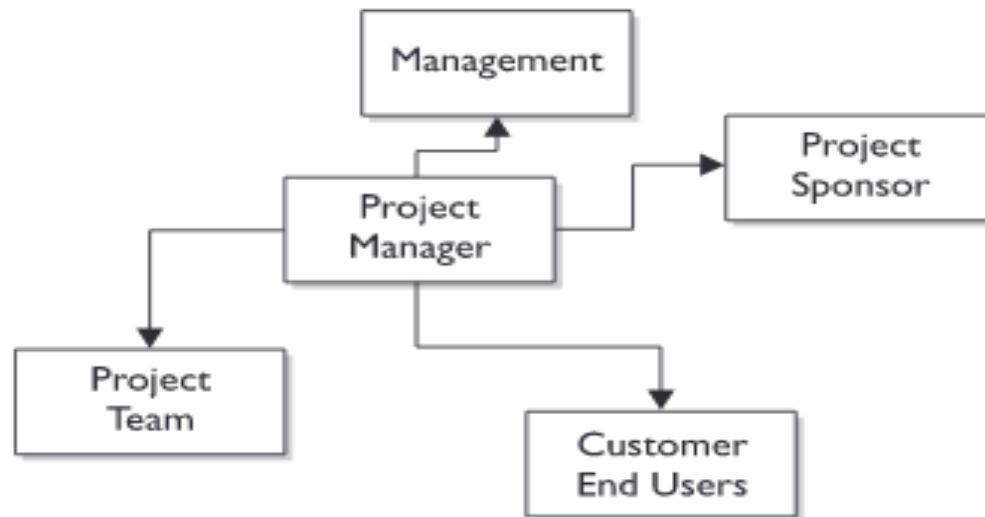
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Commitment from the Project Team's Managers

- If you are working in a functional or matrix environment, managing a project team is a complex process that requires a commitment from the team members' managers.
- The managers of the team members may come from several different departments within the organization, or they could all be directly within the IT department.
- The structure of your organization will have a huge impact on the attitude and outlook of the project team on the technology project.

- Project managers must keep many people informed on the project status.

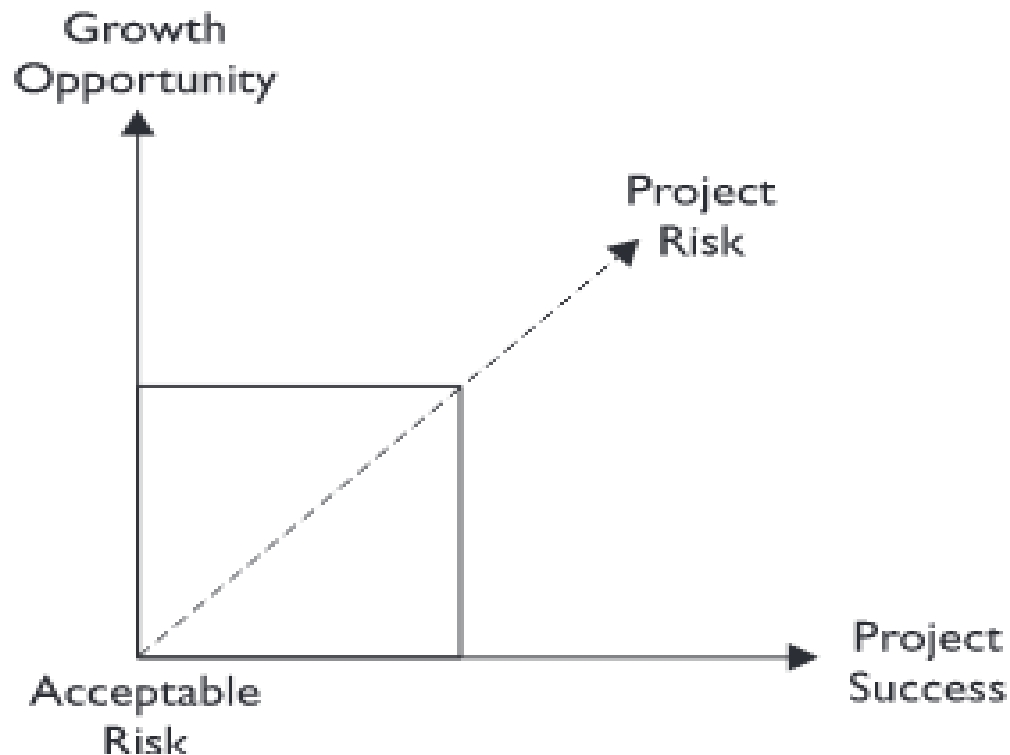


Project Completion and Team Members' Growth

- As a project manager, your obvious goal is to complete the project as planned, on time, and on budget.
- As you begin to assign your team members to the tasks, you'll have a serious challenge to conquer.
- Team members will look to you to assign tasks that allow them to grow and learn new skills.

Cont...

- Team members' growth must be balanced with the project's health



Cont..

- A project manager who never allows team members to attempt tasks that may be slightly beyond their grasp will not win the support of the project team.
- A project manager must give team members a chance to learn from the work and glean new skills and abilities.
- A solution that you should try to incorporate is mentoring. Allow the inexperienced (but willing to learn) team member to work with the more advanced team member on the critical path assignments.

Cont...

By coupling these two team members on assignments through the critical path, you are accomplishing several things:

- Allowing the inexperienced team member to gain new experience
- Allowing the technical team member to share his knowledge
- Providing a degree of on-the-job training

Cont...

- Ensuring the critical path will be completed accurately
- Satisfying the needs of management to allow team members to grow
- Allowing your resources to become more savvy for future projects

Cont...

Motivating the Team

- Motivation is more than a pep speech and a positive quote in your outgoing e-mails.
- Motivation, in project management, is the ability to transfer your excitement to your team members and have them act on that excitement

Cont...

Understanding Motivation

- Fred Herzberg, a management consultant and business theorist, conducted a study in 1959 that resulted in his Motivation-Hygiene Theory.
- Hygiene agents must exist before motivating agents can be offered.

Cont...

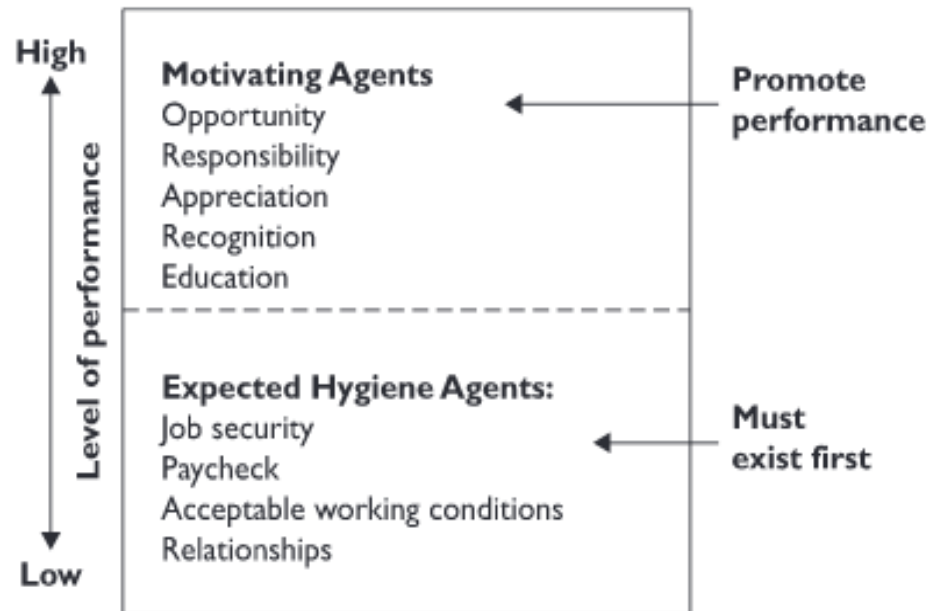
Herzberg's theory also believes people are either motivation-seekers or hygiene-seekers. Hygiene seekers take comfort in

- Company policy and administration
- Supervision
- Salary
- Interpersonal relationships
- Working conditions

- These employees like to feel safe, guarded, and secure in their job and their organization.
- They are not overly excited by opportunity, growth, or the challenge of the work. Inversely, there are five factors that motivation seekers take comfort in:
 - Achievement
 - Recognition
 - The work itself
 - Responsibility
 - Advancement

Cont...

- Hygiene agents must exist before motivating agents can be offered.

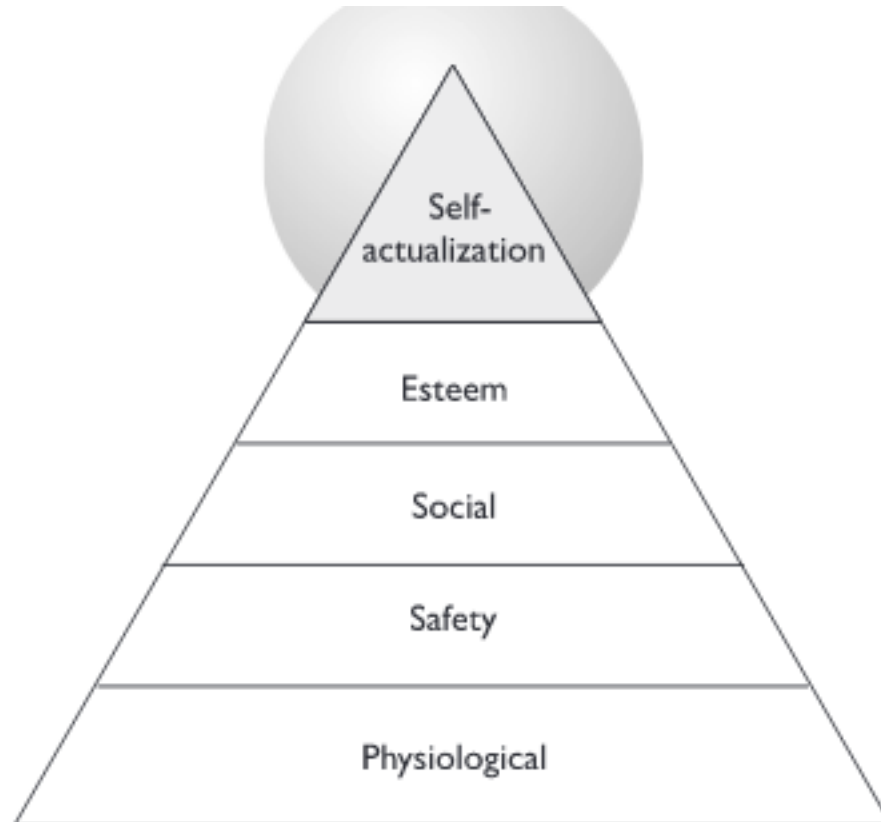


What Team Members Need

- According to Abraham Maslow, people work in order to satisfy a hierarchy of their needs.
- The pinnacle of needs is self-actualization.
- People want to contribute, prove their worth, and use their skills and abilities.

1. **Physiological** People require these necessities to live: air, water, food, clothing, and shelter.
2. **Safety** People need safety and security; this can include stability in life, work, and culture.
3. **Social** People are social creatures and need love, approval, and friends
4. **Esteem** People strive for the respect, appreciation, and approval of others.
5. **Self-actualization** At the pinnacle of needs, people seek personal growth, knowledge, and fulfillment

Cont...



Cont...

- Maslow's theory states that people work for self-actualization.
- David McClelland developed his acquired-needs theory based on his belief that a person's needs are acquired and develop over time.
- People's needs are shaped by life experiences and circumstances.
- This theory is also known as the Three Needs Theory because there are just three needs for each individual and one need is considered the driving motivation behind the actions people take.

Cont...

- Depending on the person's experiences, the order and magnitude of each need shifts
- Need for Achievement These people need to achieve, so they avoid both low-risk and high-risk situations. Achievers like to work alone or with other high achievers, and they need regular feedback to gauge their achievement and progress.

Cont...

- Need for Affiliation People who have a driving need for affiliation look for harmonious relationships, want to feel accepted by people, and conform to the norms of the project team.
- Need for Power People who have a need for power are usually seeking either personal or institutional power.
- Personal power generally means wanting to control and direct other people. Institutional power means wanting to direct the efforts of others for the betterment of the organization.

Cont...

Theorizing on Management and Leadership

- Management is about getting things done and creating key results. Leadership is about aligning, motivating and directing people.
- The theory goes on to state that management actually shifts from position to position, depending on the worker and the conditions that warrant the behavior of the manager:

- X is bad. These people need to be watched all the time and micromanaged ;they cannot be trusted. X people avoid work, shun responsibility, and lack the aptitude to achieve
- Y is good. These people are self-led and motivated, and they can accomplish new tasks proactively.

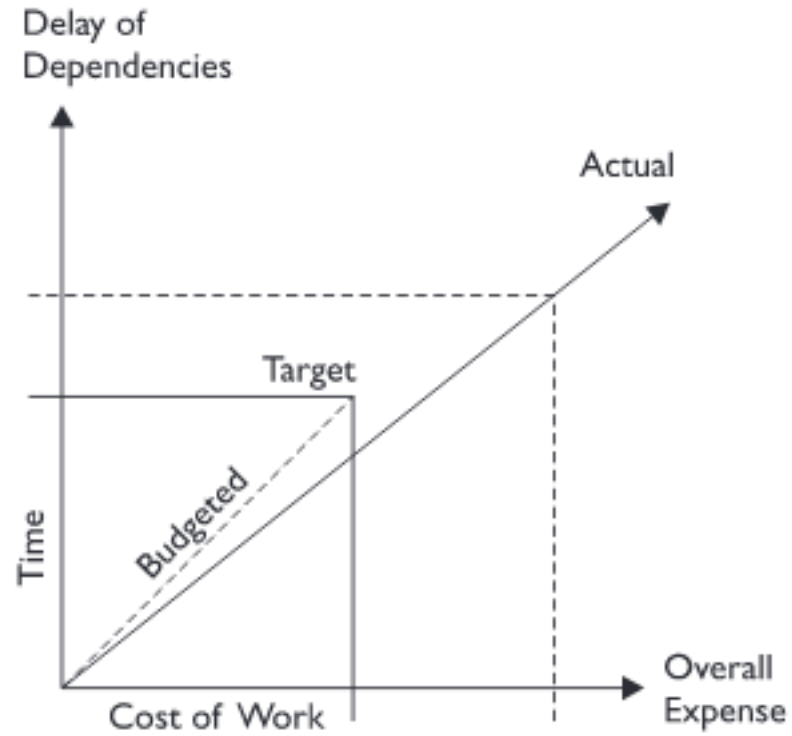
Tracking Progress

- There are several reasons why you must have a formal process for tracking progress.
- At the top of the list of reasons: tracking project progress will help you take corrective actions and preventive actions to the project.
- Corrective actions allow you to direct the project team to fix an error to get the project back in alignment with the project objectives.

Creating a Reporting Process

- A project management information system (PMIS) can streamline this process—so long as the quality is there and you can verify that the work is actually being completed.
- Tasks that exceed their durations impact both the budget and the project

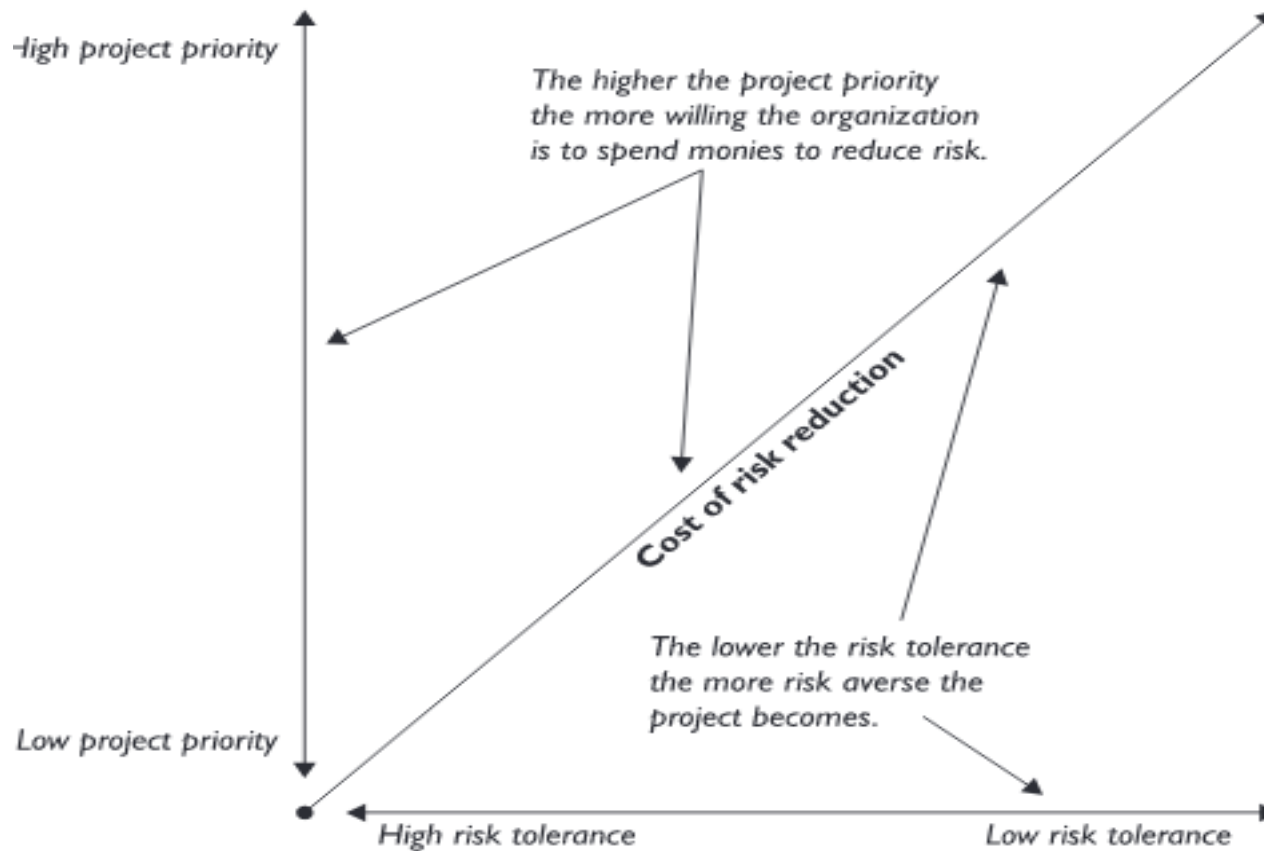
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- Tasks that exceed their durations impact both the budget and the project.
- Implement Schedule Duration Compression
- Invoke Management Reserve
- Reassign the Work Unit

Cont...

- As risk is reduced, cost may increase



Cont...

Status Collecting Tools

- As a project manager, you may not always have the time to chat with each team member each week to get a verbal confirmation on the progress of each task.
- You will need a process to streamline the collection of hard numbers on the hours and percentages of the work completed.
- There are several methods you can use to collect this information from your team:

Cont...

There are several methods you can use to collect this information from your team:

- E-mail
- Spreadsheets
- Web forms
- Project management information system (PMIS)

Tracking Financial Obligations

- The amount of finances spent on the project to date
- Any cost variances
- Actual costs versus the budgeted costs
- Value of work performed
- Cost variances and offset
- Suggestions, when necessary, to reduce the cost of resources

Cont...

Tracking Actual Costs

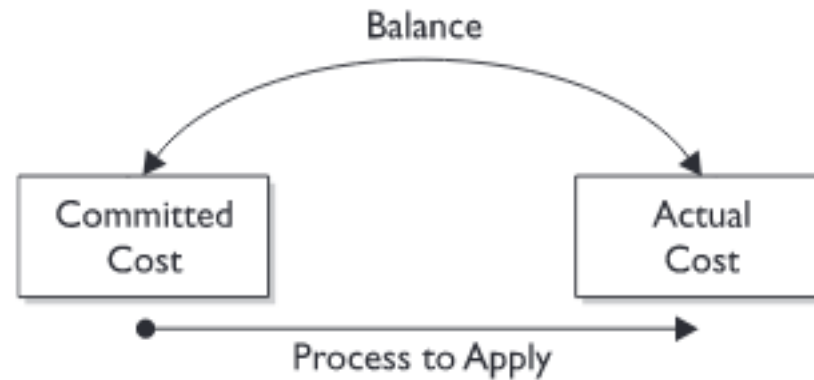
Tracking the actual cost of the project is done by collecting the amount charged on invoices from vendors and consultants and the dollar amount assigned to the team members' hours or the tasks they are completing.

Cont...

- The ongoing sum of this collection is the actual cost of the project.
- This includes rework due to lack of quality; waste from materials; and purchased time from consultants, subject matter experts, or vendors.

Cont...

- The committed cost and actual cost should be in balance.



Cont...

Determining Earned Value

- Earned value is an excellent system to test, in an ongoing process, if the work completed on a project is in alignment with the budgeted costs for a project.
- Earned value is a measure for project performance.

Cont...

- This approach to financial management is ideal for hourly workers such as consultants, application developers, and resources that have a fixed hourly rate.

Cont...

Controlling Finances

Earned value management (EVM) has a few fundamental values:

Earned value (EV) Earned value is representative of the work completed to date regardless of how long it took to accomplish it. For example, if a project has a budget of \$100,000 and the work completed to date represents 25 percent of the entire project work, its EV is \$25,000.

Cont...

- Planned value (PV)Planned value is how much the project should cost to get to a specific point in the schedule.
- For example, if a project has a budget of \$100,000 and month six represents 50 percent of the project work, the PV for month six is \$50,000

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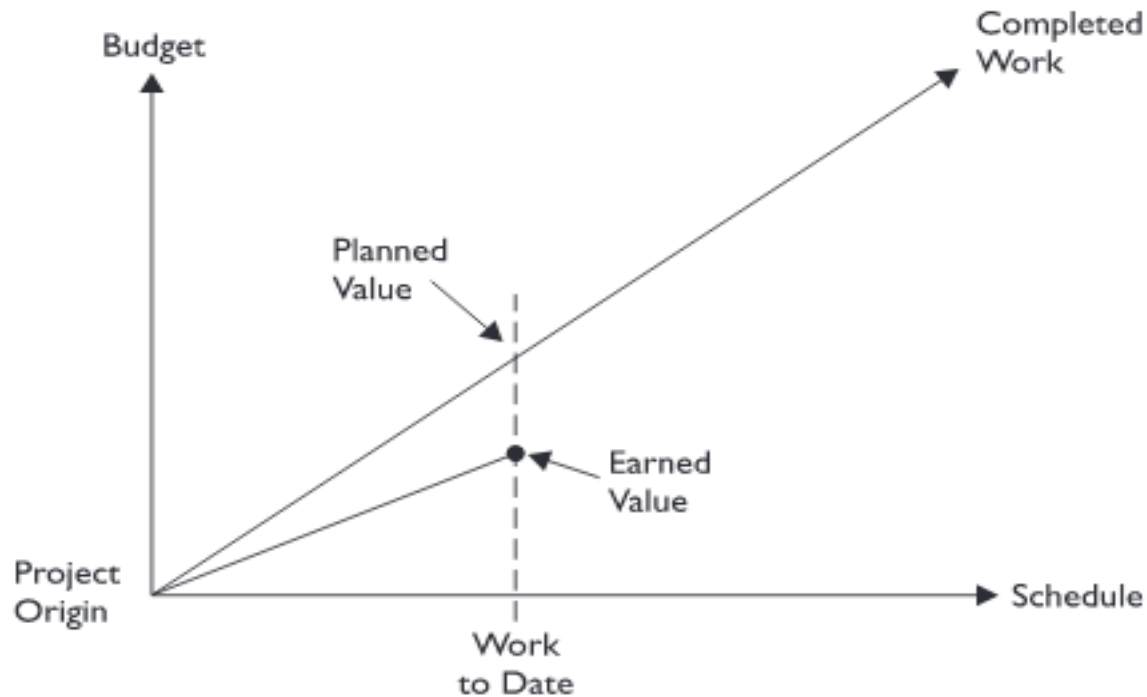
- **Actual costs (AC)** Actual costs are the actual amount of monies the project has required to date. For example, if a project has a budget of \$100,000 and \$35,000 has been spent on the project to date, the AC of the project would be \$35,000.
- **Cost variance (CV)** A cost variance occurs when the actual cost of the project work is more or less than the EV. For example, your EV is calculated to be \$25,000, but you had to spend \$35,000 to get there

Cont...

- Schedule variance (SV) A schedule variance occurs when the EV is more or less than the PV. For example, the project is supposed to be worth \$75,000 in month six; however, at month six your EV is only \$45,000. You've got a whopping SV of \$30,000.

Cont...

- Earned value can predict if a project will be financially strapped



Cont...

Calculating the Cost Performance Index

- The cost performance index (CPI) is a reflection of the amount of actual cumulative dollars spent on a project's work and how close that value is to the predicted budgeted amount.

Cont....

Calculating the Scheduled Performance Index

- The scheduled performance index (SPI) is a formula to calculate the ratio of the actual work performed versus the work planned.
- The SPI is an efficiency rating of the work completed over a given amount of time.
- It is not a dollar amount, but rather a percentage of how closely the completed work is to the predicted work.

Cont....

- SPI is the ratio of the work planned and actual work performed

$$SPI = \frac{\text{Earned Value}}{\text{Planned Value}}$$

Cont...

Calculating the To-Complete Performance Index

- If you want to see if your project can meet the budget at completion, you 'll use this formula:
$$TCPI = (BAC - EV) / (BAC - AC).$$
- If you want to see if your project can meet the newly created estimate at completion, you'll use this version of the formula: $TCPI = (BAC - EV) / (EAC - AC).$

Cont...

- TCPI is a formula to predict the ability of a project to stay within budget.

Numerator is how much is left in the budget.

$$TCPI = \frac{\text{Budget} - \text{Earned Value}}{EAC - AC}$$

EAC is the Estimated Cost at Completion.