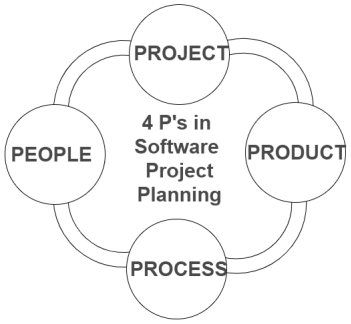
IT Project Management and Project Scheduling

- 4 P's

For properly building a product, there's a very important concept that we all should know in software project planning while developing a product. There are 4 critical components in software project planning which are known as the 4P's namely:

- Product
- Process
- People
- Project



These components play a very important role in your project that can help your team meet its goals and objectives. Now, Let's dive into each of them a little in detail to get a better understanding:

The people:

People of a project include from manager to developer, from client to finish user. however principally people of a project highlight the developers. it's thus vital to own extremely skillful and intended developers that the software package Engineering Institute has developed land Management Capability Maturity Model (PM-CMM), "to enhance the readiness of software package organizations to undertake progressively advanced applications by serving to to draw in, grow, motivate, deploy, and retain the

talent required to boost their software package development power". Organizations that brought home the bacon high levels of maturity within the people management space have a better chance of implementing effective software package engineering practices.

The following categories of people are involved in the software process.

- Senior Managers
- Project Managers
- Practitioners
- Customers
- End Users

Senior Managers define the business issue. Project Managers plan,motivate, Organize and control the practitioners who do the Software work.Practitioners deliver the technical skills that are necessary to engineer a product or application.Customer specifies the requirements for the software to be developed.End Users interact with the software once it is released.

The Product:

Product is any package that needs to be developed. To develop with success, product objectives and scope ought to be established, various solutions ought to be thought of, and technical and management constraints ought to be known. While not this data, it's not possible to outline cheap and correct estimates of the price, a good assessment of risk, a sensible breakdown of project tasks or a manageable project schedule that gives a meaningful indication of progress. Before a software project is planned, the product objectives and scope should be established, technical and management constraints should be identified. Without this information it is impossible to define a reasonable cost,amount of risk involved,the project schedule etc. A software project scope must be unambiguous and understandable at the management and technical levels. To develop a reasonable project plan we have to functionally decompose the problem to be solved.

The Process:

A package method provides the framework from which a comprehensive arrangement for package development is established. variety of various task sets— tasks, milestones, work merchandise, and quality assurance points—enable the framework activities to be custom-made to the characteristics of the package project and therefore the necessities of the project group. Finally, umbrella activities become a more prominent method model. Umbrella activities are freelance or framework activity and occur throughout the method.

Here the important thing is to select an appropriate process model to develop the software.There are different process models available.They are Waterfall model,Iterative waterfall model,Prototyping model,Evolutionary model,RAD(Rapid Application Development) model, Spiral model.In practice we may use any one of the above models or a combination of the above models.

The Project:

Here, the manager needs to perform some job. The project contains all and everything of the entire development method and to avoid project failure the manager needs to take some steps, needs to fret concerning some common warnings etc. In order to manage a successful software project,we must understand what can go wrong (so that problems can be Avoided)and how to do it right. A project is a series of steps where we need to make accurate decisions so as to make a successful project.

- W5HH Principle

Barry Boehm gave a philosophy that prepares easy and manageable designs or outlines for software projects. He also gave a technique to discuss objectives, management, duties, and technical approach of the project and its necessary resources. Then he named it the W5HH principle when few questions resulted in project properties, definition, and resultant plan to make the project successful.

The W5HH principle in software management exists to help project managers guide objectives, timelines, responsibilities, management styles, and resources. In this lesson, we'll explore each part.

W5HH questions :

Why is the system going to be developed?

For the purpose of software work, all stakeholders must assess the validity of the system product/project. Here Barry questions whether the project's purpose will justify the cost, time spent on it by people?

What activities need to be done in this?

In this Barry questions what task is needed to be done for a project currently.

When is this done?

Project Scheduling is done by the team after recognizing when project tasks will be started and when they enter into the final stage to reach the goal.

Who are the reasons for these activities in this project?

Every member who is part of the software team is responsible for this. And their roles are defined.

Where are these authoritatively located?

Not only do software practitioners have roles in this but also users, customers, stakeholders also have roles and responsibilities organizationally.

How is the job technically and managerially finished?

All technical strategies, management rules of the project are defined after knowing the scope of the project which is being built.

How much part of each resource is required?

This is known by software developers after the estimation of each resource as per the needs of customers/users.

This W5HH principle of Bohem is appropriate irrespective of the scale or difficulty of software projects being developed. These questions help in planning the outline of the project for the software team.

The W5HH principle outlines a series of questions that can help project managers more efficiently manage software projects. Each letter in W5HH stands for a question in the series of questions to help a project manager lead. (Notice there are five ”W” questions and two ”H” questions).