# A Project manager being a tenth planet managing the other nine planets of Project management for a successful project delivery

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Abstract— As business become more dependent on information technology for their operations, IS project managers are under increasing pressure to deliver quality applications software on time and within budget. Thus, in addition to their technical skills, they must master the necessary management skills to lead and control software development projects. Through software development the structured application of scientific and engineering principles are needed in order to analyze, design, construct, documentation and maintain it. To achieve this project management principles are required. Every project stands on three columns which are cost, schedule and scope. Care is to be taken for balancing the three columns and its up to the project manager to work on finding ways for completing a project. In this paper I am concentrating on the importance of different identified P's which help in deriving required profits for a project or project manager? And in the later part of this paper it's also explained about linking the identified P's to the phases of project management life cycle. This alignment is to ensure that the project management life cycle is not ignored.

Keywords- Project management, Profitability, Process, Successful projects, Predict.

#### I. Introduction

The project manager is accountable for ensuring that everyone on the team knows and executes his or her role, feels empowered and supported in the role, knows the roles of the other team members and acts upon the belief that those roles will be performed. Project management requires that the project manager is responsible for coordinating and integrating activities across multiple functional lines. In order to do this, the project manager needs strong communicative and interpersonal skills, must become familiar with the operations of each line organization and should have a general knowledge of the technology being used in which a understands and uses the knowledge and skills on the below technical/managerial Planets.

The person responsible for developing, in conjunction with the project sponsor, a definition of the project. The project manager then ensures that the project is delivered on time, to budget, and to the required quality standard (within agreed specifications). He/she ensures the proper allocation of resources within the project, and manages relationships with a wide range of groups (including all project contributors). The project manager is also responsible for managing the work of consultants, allocating and utilizing resources in an efficient

Even though the project manager is very high skill full cannot do the entire job themselves. That is why strong team building and teamwork skills are so critical to the success of the project manager.

The project manager's job is not an easy one. Project managers may have increasing responsibility but very little authority. This lack of

authority can force them to "negotiate" with upper-level management as well as functional management for control of company resources. In the project environment, everything seems to revolve about the project manager. Although the project organization is specialized, task-oriented entity, it cannot exit apart from the traditional structure of the organization. The project manager therefore must walk the fence between the two organizations.

Why is managing projects so difficult? Why we seeing so many project failures, especially in software development? Some of the difficulties stem from the inherent nature of the product, others are management related. Among the common software related problems are:

- Maintain human relationships within the project team.
- Maintain human interrelationships between the project team and the functional organizations.
- Maintain human interrelationships between the project team and senior management.
- Maintain human interrelationships between the project team and customer's organization, whether an internal or external organization.

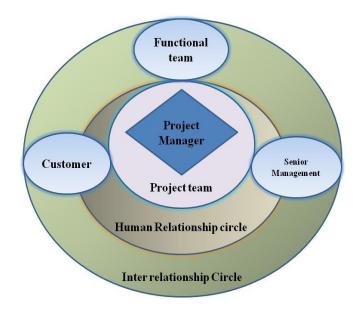


Figure -1, Project manager relationship circle

To be an effective Project manager, he/she as an individual must equip management as well technical skills. Out of their observations, Executives found that it's much easier to train the existing technical staff to empower the project management positions.

Some key challenges faced by the project manager.

Results from some of the recent surveys conducted by ESI international sited that one of the most pressing tasks for the high executives including managing complex projects, and managing and coping with the changes both internally and externally within a program or portfolio. Among the key challenges of today's project managements are:

- The importance of project complexities has increased over these recent years. This is mainly due to the increase in competitiveness between competitors. The ability to adapt to these changing requirements, with the development skills and efforts need to go side by side with the change in requirements as well. However, the skill to manage these changes is still scarce today.
- 2. A good project manager need to adapt uncontrollable changes is the environment or organizational changes which might impact the project itself, by successfully tracking the progress and outcome of the project without any setback. To develop the business analysis, project manager must communicate effectively with team members and stakeholders.
- 3. Managing global projects and dealing with multiple people from different regions/greater concern to commercial organizations than to government entities. Whether it is for commercial organizations or government entities and regardless it is a global project or a regional project, the role of a project manager don't change, which is to manage and drive for the end results.
- 4. Managing high risk projects has been cited as a pressing issue for some of the conventional leaders whom prefer to lead less risky and therefore less challenging projects but are more manageable. High risk projects constituted the types of projects which has no way to roll back due to budget constraint, scarce of capacity, licensing constraint etc.
- Non centralized communication flow often led to misinterpretation of key message which will eventually ending up with unnecessary issues and misunderstanding among the organization as well as team members.
- 6. Ensuring that all researches, activities and coordination are carried out with in the projects is of the highest quality standard despite the change of the variables from time to time. So whether it is a sudden cut in the project budget, or a 20% reduction of head-counts support, the project timeline is still in fact as per what have been committed at the envisioning stage of this project.

# II. PLANETS AROUND THE PROJECT MANAGER.

#### (A). what are the Planets?

The Planets is a collection of information about the project management intended for a project manager with technical background. An efficient Software Project manager focuses on the each and every planet to get the profitable project to his/her organization

#### Planets:-

- 1. People (Project resources)
- 2. Product (Project End-Product)
- 3. Process (Approach to complete Project)

- 4. Project (Flow of Work)
- 5. Procuring (Requirements Gathering)
- 6. Planning (Project Plan)
- 7. Projections (Scheduling)
- 8. Prediction (Anticipate Risk or Uncertainties)
- 9. Patience (Project Management)

Of course, after all they are an easy to remember, that helps in simplifying the complexities of project management. Realistically project management is always going to come complete with variation in the form of specification changes, team personalities, parts problems, management incompetence, competitive actions and marketing gymnastics. Certainly the Project manager can be used to help minimize potential project issues, but besides understanding how and when to use the 9Planets the project manager additionally has to assess the caliber of these. How good are the processes, are team skills applicable to project needs?

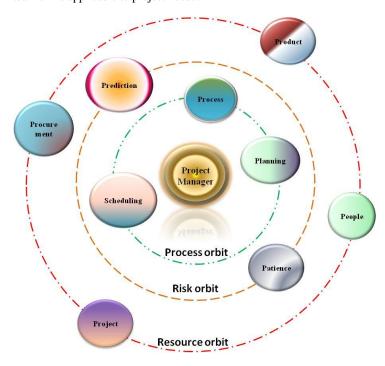


Figure – 2, Project Manager's Galaxy

# 1. People (Project Resources)

The first Planet is the People, there are the architects, developers, testers, and their supporting management, plus users, customers, and other stakeholders are the prime movers in a software project

Project managers cannot live on technical abilities alone. They must also be armed with strong people skills like communicating with project sponsors, building relationships with stakeholders and clients, and leading the project team. They engage with many different people through the life of a project. These people differ in their understanding, skills, and knowledge, and each person brings his or her own set of expertise to the job and its tasks. He/she expected to engage diverse thinking and ideas from every person and to respect and honor different perspectives and cultures. Effective project managers constantly assess and check assumptions with each employee on a task-by-task basis and apply different management

styles based on what the employee needs the most to accomplish a task.

This 'people first' awareness enhances project management performance, individual performance and permeates the lives of every stakeholder. These learning's become part of each individual for future interactions and increases usage of latent potential

People skills have to be adeptly integrated into the project development and the team emergence. These same skills have to be maintained throughout all efforts for the project, sustaining individuals and their work output, tracking down and demanding where appropriate and of course commending where well deserved. People skills are still critical at the apparent end of a project when people and their work are in transition; often insecurity and chaos is averted with adroit handling. All this, and manage stakeholders, contributors and personal needs for the project manager too! Our ability to relate to individuals, to create teams, to elicit the best from project contributors and influence decision-making, throughout the project life cycles and beyond, is the essence of project management.

# 2. Product (project End-Product)

The second Planet is the product. A software project manager is confronted with a dilemma at the very beginning of a software engineering project. He has to very closely examine the product and the problem it is intended to solve. In other words, the scope of the product must be established and bounded at the very beginning by the Project Manager. The software to be built A software project manager is confronted with a dilemma at the very beginning of a software engineering project. Quantitative estimates and an organized plan are required, but solid information is unavailable.

Product must be defined in a written document, which clarifies the product features, internal and external interfaces and ancillary products. Similarly, a resultant GAP analysis is strongly recommended. The software to be purchase must perform what the defined products need, at least through workarounds and customization. Important features should be realized straightaway by the system. External development is to be held in a minimum scale.

A detailed analysis of **Procurements** would provide necessary information for estimates, but analysis often takes weeks or months to complete. And procurements are changing regularly as the project proceeds.

#### 3. Process in project

A software development process or life cycle is a structure imposed on the development of a software product. There are several models for such processes, each describing approaches to a variety of tasks or activities that take place during the process. A process framework establishes the foundation for a complete software process by identifying a small number of framework activities that are applicable to all software projects, regardless of their size or complexity. The main activities are applicable to the vast majority of software projects and they are.

- 1. Communication with stakeholders which includes requirement acquisition.
- 2. Planning
- 3. Modeling
- 4. Construction
- 5. Deployment

Software engineering/project management incorporates a development strategy that encompasses the process, methods and tools. This strategy is often referred to as a software process model or

a software engineering paradigm. A software development process can also be defined as a set of activities needed to transform the user requirements into a software system.

Software projects utilize a process to enable execution of the engineering tasks to achieve the goal of delivering a software product that satisfies the user requirements. Processes so utilized frequently conform to a process model — a general process structure for the lifecycle of software development. A process model generally specifies the set of stages in which a project should be divided, the order in which the stages should be executed, and any other constraints and conditions on the execution of stages. The primary functions of a software process model are to determine the order of stages involved in software development and evolution and to establish the transition criteria for progressing from one stage to next. These include completion criteria for the current stage plus choice criteria and entrance criteria for the next stage. Thus a process model addresses the following software project questions:

- (1) What shall we do next?
- (2) How long shall we continue to do it?

The most influential and commonly used process model is the waterfall model, in which the different phases of requirements specification, design, coding, and testing are performed in sequence. Select the process model that is appropriate for the software to be engineered by a project team.

- 1. The Linear Sequential Model
- 2. The Prototyping Model
- 3. The Spiral Model
- 4. The Fourth Generation Technique Model
- 5. Iterative Water fall model.
- 6. SCRUM/Agile.

Process Activities/Steps

**Requirement Analysis:** - Extracting the requirements of a desired software product is the first task in creating it. While customers probably believe they know what the software is do, it may require skill and experience in software engineering to recognize in complete, ambiguous or contradictory requirements.

**Specification**: - Specification is the task of precisely describing the software to be written, in a mathematically rigorous way. In practice, most successful specifications are written to understand and fine-tune applications that were already well-developed, although safety-critical software systems are often carefully specified prior to application development. Specifications are most important for external interfaces that must remain stable.

**Software architecture**: - The architecture of a software system refers to an abstract representation of that system. Architecture is concerned with making sure that software system will meet the requirements of the product, as well as ensuring that future requirements can be addressed.

**Implementation**: - Reducing a design to code may be the most obvious part of the software engineering job, but it is not necessarily the largest portion.

**Testing**: - Testing parts of software, especially where code by two different engineers must work together.

**Documentation**: - An important task is documentation the internal design of software for the purpose of future maintenance and enhancement.

**Training and support**: A large percentage of software projects fail because the developers fail to realize that it doesn't matter how much time and planning a development team puts into creating software if nobody in an organization ends up using it. People are occasionally resistant to change and avoid venturing into an unfamiliar area, so as a part of the deployment phase, it's very important to have training classes for the most enthusiastic software users, shifting the training towards the neutral users intermixed with the avid supporters, and finally incorporate the rest of the organization into adopting the new software. Users will have a lot of questions and software problems which leads to the next phase of the software.

Maintenance: - maintaining and enhancing software to cope with newly discovered problems or new requirements can take far more time than the initial development of the software. Not only may it be necessary to add code that does not fit the original design but just determining how software works at some point after it is completed may require significant effort by a project manager. About 60% of all software engineering work is maintenance, but this statistics can be misleading. A small part of that is fixing bugs. Most maintenance is extending systems to do new things. Which in many ways can consider new work?

The Project manager must decide which process model is most appropriate for project development with considering of the 3 columns. When a process model has been selected, the team defines a preliminary project plan based on the set of common process frame work activities. Once the preliminary plan is established, process decomposition begins. That is, a complete plan, reflecting the work tasks required to populate the frame work activities must be created. An effective process mapping should delineate functional roles, process steps and detailed content of process steps. It should highlight the system-related activities and, data inputs and outputs at these activities. It should also define system printouts. Analysts and business specialists must analyze the process a number of times, there by moving from less to more detailed levels By conducting a careful GAP analysis, analysts can identify the needs for future work-around and customization. External development is to be avoided as much as possible. A software process provides the framework from which a comprehensive plan for software development can be established. A small number of framework activities are applicable to all software projects, regardless of their size or complexity. A number of different task sets-task; milestones, work products, and quality assurance points- enable the framework activities to be adapted to the characteristics of the software project and the requirements of the project team.

# 4. Project

The word project comes from the Latin word projectum from the Latin verb proicere, "before an action" which in turn comes from pro, which denotes precedence, something that comes before something else in time (paralleling the Greek  $\pi\rho\dot{\phi}$ ) and iacere, "to do". The word "project" thus actually originally meant "before an action".

When the English language initially adopted the word, it referred to a plan of something, not to the act of actually carrying this plan out. Something performed in accordance with a project became known as an "object". In project management a project consists of a temporary endeavor undertaken to create a unique product, service or result. Another definition is a management environment that is created for the purpose of delivering one or more business products according to a specified business case.

A project is a temporary assemblage of resources to solve a one-of-a-kind problem. Projects come in various sizes and types. They range from small projects employing hundreds of people for several days/months/years (depending on the size of the project). But regardless of size, all projects exhibit common characteristics that distinguish them from other types of work.

- Projects have specific objectives.
- Projects must be completed within a specific time period.
   They have well defined beginnings and ends.
- Projects must be completed within a given budget.
   Although some projects may have loosely defined budgets, all projects have budgetary constraints.

A five-part common sense approach to Software Projects is followed as a rescue/ prevention measure

- 1. Start on the right foot.
- 2. Maintain Momentum
- 3. Track Progress
- 4. Mark Smart decisions
- 5. Conduct a Postmortem analysis.

#### 5. Procuring all the Requirements

Software requirements are the real-world goals, needed functionality and constraints for the software to be developed. The process of software requirements engineering includes identifying the stakeholders and their needs and documenting these for analysis and Implementation. For a software development project to be successful, the software engineers and the client have to agree on the requirements to be implemented In general majority of the failed projects have failed due to the wrong or insufficient procurements gathering.

Work on a software project generally follows a pattern of a small number of high-leverage up-stream decisions providing the basis for a much large number of lower-leverage downstream decisions. Thus project manager make high-leverage requirements decisions that provide the basis for medium-leverage design decisions, which in turn provide the basis for low-leverage code, test-case, and user-documentation decisions.

A small mistake in upstream work can affect large amount of downstream work. A Change in a procurement specification can imply the changes in the whole SDLC, that is it can include the some bulk of lines of code spread across with more number of classes in sometimes there may be must and should include some modules in the project, after that we have to written the test cases as well as to execute the test cases and also need to change the end-user documentation. So in any type of project, requirement collection plays a vital role. It is not only the important for the project but also important for the project management as well as project manager. Collection of requirements looks like straightforward, but this one of the important phase for starting of the project and it is a important planet for the project manager. There are the many types and levels of requirements while gathering

A Project Manager can consider the following points while doing Procurement requirements Management

- Capture and verity maximum number of requirements from the end user or client.
- 2. Complete requirements in early stages of the projects
- 3. Involve end users as early as possible
- 4. Create a throwaway prototype
- 5. Deliver the software incrementally.

- 6. Conduct a requirement workshop
- 7. Perform use case analysis
- 8. Create the user manual first.
- 9. Get the right stakeholders
- 10. Establish a teamwork mentality
- 11. Plan team interaction
- 12. Use a group Support System
- 13. Establish a shared vocabulary
- 14. Maintain a list of requirements
- 15. Record requirements attributes
- 16. Manage by probabilities of completion rather than absolutes
- 17. Base decisions on more than mechanics
- Select an operational approach coupled with risk assessment
- 19. Plan more than one release at a time
- 20. Re-plan before every new release
- 21. Find a workable solution
- 22. Providing training in the negotiation process
- 23. Use a trained facilitator
- 24. Consider requirements, architecture and marketplace simultaneously
- 25. Leverage the triple constraint (Cost Vs time Vs Scope)

#### 6. Planning of the project

Planning is the process of formulating and implementing decisions about a project/organization's future direction. Every project manager must have the foresight of the project planning as well as the strategic planning. Below are the things which project manager will follow in strategic planning

- Scans the external environmental and industry environment for changing conditions
- Interprets the changing environment in terms of opportunities or threats
- Analyzes the project/organization resource base for asset strengths and weakness.
- Defines the mission of the business by matching environmental opportunities and threats with resource strengths and weakness.
- Sets goals for pursuing the mission based on top management values and sense of responsibility.

What does strategic planning for project management sometimes fail?

Knowledge about this process is growing, and new information is being disseminated rapidly, why, then, does this process often fail?

Following are some of the problems that can occur during the strategic planning process. Each of these pitfalls must be considered carefully if the process is to be effective.

Lack of CEO endorsement: - Any type of strategic planning process must originate with senior management. A failure by senior management to endorse strategic planning may signal line management that the process is unreal.

Failure to reexamine: - Strategic planning for project management is not a one-shot process; it is a dynamic, continuous process of reexamination feedback, and updating.

Being blinded by success: - Simply because a few projects are completed successfully does not mean that the methodology is correct, nor does it imply that improvements are not possible. A belief that "you can do no wrong" usually leads to failure.

Over responsiveness to information: - Too many changes in too short a time frame may leave employees with the impression that the methodology is flawed or that its use may not be worth the effort. The issue to be decided here is whether changes should be made continuously or at structured time frames.

Failure to educate: - People cannot implement successfully and repetitively a methodology they do not understand. Training and education on the use of the methodology is essential.

Failure of Team acceptance: - Team-wide acceptance of the methodology is essential. This may take time to achieve in large organizations.

The art of planning for the future has always been a human trait. In essence a project can be captured on paper with a few simple elements: a start date, an end date, the tasks that have to be carried out and when they should be finished, and some idea of the resources (People) that will be needed during the course of the project. When the plan starts to involve different things happening at different times, some of which are dependent on each other, plus resources required at different.

The project is planned to an appropriate level of detail. The main purpose is to plan time, cost and resources adequately to estimate the work needed and to effectively manage risk during project execution. As with the intuition process group, a failure to adequate plan greatly reduces the project's chances of successfully accomplishing its goals. The project planning process and consists of the following basic tasks:

- Defining the sequence of tasks to be performed.
- Identifying all deliverables associated with the project.
- Estimating the resources required to perform each task.
- Scheduling all tasks to the performed.
- Defining the budget for performing the tasks.
- Define the organization executing the project.
- Identifying the known project risks.
- Defining the process ensuring quality of the project product.
- Defining the process specifying and controlling requirements.

The project plan is one of the most important parts of the whole piece of work, and if this has been designed badly then it will have a negative effect on your work at some point. When you work on your first project it can be tempting to brush past the task of project plan writing but once you hit problems with a poorly thought out plan you are sure to give this task the attention it deserves in the future.

Some Key challenges faced by the project manager during the project planning

- Strict deadline but no other option as it was a compliance requirement.
- Backup resources had to be identified as few of the team members may leave but due to their good technical skills, they were a part of the project team.
- Backup resources for each module had to be identified and trained within the project team.
- In order to avoid dependency on single resource, task allocation was done by ensuring that there are more than one resources involved in any area.
- Change in requirement is inevitable but handling those requirement changes within the time frame is difficult.
- Replacing the two project team members by new resources when they left the organization in the middle of the project.

- Full utilization of resources as no luxury of any waiting time / idle time.
- High quality standards had to be met.

#### 7. Projections of project schedule

Scheduling is an inexact process in that it tries to predict the future. While it is not possible to know with certainty how long a project will take, there are techniques that can increase your likelihood of being close. If you are close in your planning and estimating, you can manage the project to achieve the schedule by accelerating some efforts or modifying approaches to meet required deadlines. Project manager role involves creating and maintaining project's schedule. Developing a project schedule requires the combination of activities, resources, and activity-performance sequences that gives you the greatest chance of meeting our clients' with the least amount of risk. One key ingredient in the scheduling process is experience in the project area; another is experience with scheduling in general When preparing a schedule estimate, consider that transition between activities often takes time. Organizations or resources outside your direct control may not share your sense of schedule urgency, and their work may take longer to complete. Beware of all external dependency relationships. Uncertain resources of talent, equipment, or data will likely result in extending the project schedule.

One important activity required for controlling project schedules is resource leveling. Resource leveling involves leveling out the workload of resources assigned in the schedule by bringing the workload of those resources within the range of their availability. A resource with too many assigned tasks scheduled at the same time, may require that work be re- assigned to another resource or tasks have to be rescheduled to a later in time and delay the completion of the project.

Developing a project schedule is the responsibility of the project manager. Project Management Institute's Project Management Body of Knowledge defines a project schedule as the planned dates for performing schedule activities and the planned dates for meeting schedule milestones. The practice of schedule development leverages knowledge gained from activity definition, sequencing, and estimating to create a formal sequence of project activities, the project schedule, that outlines when required work should start, when it is expected to be completed, and who will do the work. The project schedule serves as a master plan which the project team, management, customers, and other stakeholders look to for an up-to-date picture of how project work is progressing. The project schedule should clearly define:

- A direct relationship to the WBS
- Major events and dates
- Sequence of work
- Interrelationships between tasks
- Task constraints
- Resources required completing each schedule activity

In creating the projections of project schedule the project manager is playing role scheduler. Creating a comprehensive project schedule is one of the more difficult activities that project managers face. After planning, the scheduler should work with the people responsible for executing the work to determine. After you specify your project's activities, take the following steps to develop an initial project schedule.

- The duration of the activities.
- The party/team that will perform the activities.

- The resources to be applied to the activities
- The method of sequencing one or more activities in relation to other activities, and.
- Communication and reporting formats, timing etc.,
- Identify immediate predecessors for all activities.
- Determine the personnel and nonperson eel resources required for all activities.
- Estimate duration for all activities.
- Identify all intermediate and final dates that must be met.
- Identify all activities or milestones outside your project that affect your project's activities.

Skilled schedulers (Project manager) can fulfill these functions, Steps to develop a project schedule by the scheduler.

- Define the Schedule Activities
- Sequence the Activities
- Estimate the Resources Needed for the Activity
- Estimating the Duration of Each of the Activities
- Schedule Development
- Monitoring and Controlling the Schedule

## "Crashing" the Schedule:

Efforts to accelerate a project schedule are commonly grouped under the term "crashing" the schedule. Maybe this term was coined to suggest that there is always some price for driving a project to completion sooner than normal.

- Add people to the schedule. Additional staff must be added early in a project or they will slow it down while learning the ropes. If you add people, you may also need to add staff for supervision and coordination, so staffs are fully applied.
- Improve productivity and work longer hours. A good team atmosphere with management support can help make this happen. Without positive nourishment of this process, you could lose your team to attrition.
- Review schedule dependencies and look for opportunities to overlap tasks or make serial tasks concurrent or parallel activities.
- Review the project scope and remove or delay futures or functionality from the project critical path.
- Consider innovative approaches such as different development methodology, alternative technologies, or outsourcing options.

#### 8. Prediction of risk and uncertainties

The project risk management knowledge area is a very vital area which may of the project management tend to overlook. A project risk is defined "An uncertain event or condition that, if it occurs will have a negative or positive effect on one or more project objectives". In the real world there are always many risks for executing each and every project. To my view a good project manager is one who is not averse to the risks, but does plan in advance the possible mitigations if the risks occur. Risks can be positive opportunities or negative threats.

Project manager must involve in Risk management of a project to identification of the possible risks from various sources and during various stages of the project. Analyze these risks and quantify their effect on the project. Then plan the mitigation for most of these identified risks.

In the practical filed it is nearly next to impossible to identify all the risks which would affect the project, but the project manager should

lead the team in identify about the 85% to 90% of the possible risks. The Identification of the risks should be an iterative process and needs to carry out in all the phases of the project. The earlier the risks can be identified the more easily the mitigation can be planned for the risks.

There are numerous clichés surrounding projects and risk - many of which are true. For example, every project on the globe carries risk and assumptions – dependencies can be obvious drivers of real risk. Good project managers will always look for these early understanding the key dependencies and risks is crucial to sharing key assumptions, risks and dependencies with in the definition phase of the project is a hugely valuable exercise, followed by effective mitigation of significant risks. The project manager should be very much in the middle of this task and preferably never simply delegate this task to someone else.

Effectively the effective management of risk is one of the most productive things any project manager can do. Again, this must be done in the definition stages- we can't define, plan and launch a project and then start to give serious attention to risk- it must be addressed as an integral part of defining the project and most especially at every key decision point/commitment in the lifecycle-the project manager must make sure that this is done – even when others do not wish to hear the results. Otherwise, there is very strong likelihood of counting the cost in time (delays) and effort (increased cost) downstream.

A software project/project manager may encounter various types of risks:

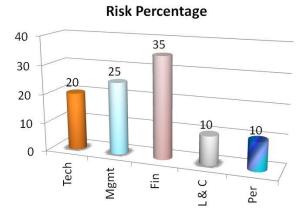


Figure – 3, Risk percentages

**Technical risks**: - It includes problems with languages, project size, project functionality, platforms, methods, standards, or process. These risks may results from excessive constrains, lack of experience, poorly defined parameters, or dependencies an organizations outside the direct control of the project team/project manager.

**Management risks:** - It includes lack of planning, lack of management experience and training, communications problems, organizational issues, lack of authority, and control problems.

**Financial risks**: - It includes cash flow, capital and budgetary issues, and return on investment constraints.

**Contractual and legal risks**: - It includes changing requirements, market-driven schedules, health & safety issues, government regulation, and product warranty issues.

**Personnel risks**: - It includes staffing lags, experience and training problems, ethical and moral issues, staff Conflicts and productivity issues

## 9. Patience while managing the project

If project manager is an impatient sort of a person then you are going to find that project management workforces you to reconsider his/her attitude. There are quite a few situations in which a lack of patience could cause you problems. As project managers, we are at the center of one of the biggest things life has to offer time. So often, the push is on getting more and more out of our time personally and as groups. *Bruce tells us that*:

"Patience is a project management tool that can help us bring about improvements to how we manage projects as well as improvements to the organization as a whole. I discovered that patience was more about waiting for an opportunity to improve things and then jumping on it than it was about waiting for the organization to recognize our brilliant ideas and joyfully adopt them.

The project manager must and should have patience while getting the requirements from the customer, work out the plan, understand the issues, Help your team members

#### III. **F**INDINGS

The mentioned Planets were accepted by Software people across different organizations. A detailed questionnaire is presented to them, and got mixed responses on the proposed solution. After analyzing the received data the mapping of Planets to the phases of PMLC are detailed below.



Figure- 4, PMLC Phases

- 1. Initiation Phase Procure, Project, People
- 2. Planning Phase Planning, Projection,
- 3. Manage Phase Prediction, Process, Patience
- 4. Closure Phase Profitability.

# IV. CONCLUSION

There is a need for organizations to link their projects back to their corporate strategies and to train project sponsors to increase the likelihood that projects will survive shifting organizational priorities. Project Management Offices and project managers must understand how each project contributes to achieving corporate goals—which should be found in the strategic plan. What is their strategic alignment? With a process in place to manage change and risk, project managers are better able to cope and deal with these challenges. Similarly, training of Project Sponsors will help to bring them on side so that resources are allocated in accordance with project importance. Project manager is the most important and responsible person in delivering a successful product or a project. A project manager normally follows different methods for completing a project. This paper presents about concentrating of the Planets making the end product to be profitable. This paper also explains where these Planets are linked to the project management life cycle phases. This link is proposed such that it doesn't deviate the normal project management life cycle. Of course, after all they are an easy to remember, that helps in simplifying the complexities of project management. Eliminating complexity in turn reduces variation, which according to quality gurus such as W. Edwards Deming improves quality, reduces expenses and increases productivity. This paper suggests, there exists a lot of scope for extending further research beyond Planets, explaining in detail.

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