

1.0 Introduction

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In order for a project run efficiently and effectively, society must provide sufficient resources including the human, time, budget and equipments. Managing a project is not an easy work to do, defining and obtaining needs are important. Prioritizing the resources throughout the duration of doing the project is necessary.

In today's generation, the Information Technology has affected society and its surroundings in a number of ways. In many societies, technology has helped develop more advanced organizations and has allowed the rise of a leisure class. Technology with its rapid growing speed is influencing old ways of doing daily affairs. Today, software project management cannot only be done thru the use of these technologies, in software project management issues may arise.

Resources are the human involved, money, place, tools or equipments or something else that is needed in order to do the different activities for a certain project. Each activity needs a resource and with these resources, the assigned resource project manager should be able to know the availability of these resources. The availability of resources includes information or data about what resources is needed to use for a project, and as well as the status or condition of the availability. There are constraints in resources, because some resources must have in advanced in order to meet the schedules or deadlines before starting the project. Having more advanced preparation is needed, resource manager also need the activity list and they need to know about how the organization normally handles resources. Resource estimation is involved.

Estimating the period of an activity means starting with the information have about that activity and the resources that are assigned to it and then working with the project team to come up with an estimate. Most of the time a project start with a rough estimation and then process it to make it more accurate.

Resource management is the proficient and helpful consumption of an organization's resources when they are needed. There are different resources in

a project such resources are the human resources, financial resources, the inventory resources, production resources, the equipments or the information technology resource. In the area of project management, processes, techniques and philosophies as to the best approach for allocating resources have been developed. Resource management is important but still resource deprivation occurs. A resource management is a key component to activity resource estimating and project human resource management. Software project management is difficult and the case with the larger discipline of project management is essential, there are different resources needed like the resource management software tools available that automate and assist the process of resource allotment to projects.

Different issues arise before, during or after the project implementation. Discussed within this part are the issues that may occur in a software project management. How it takes place and why it occurs. Resources of a project play an important role in a software project management not only the project manager but the entire team. There are symptoms of defective strategy discussed such as Project managers fight over resources, Project priorities frequently change, Managers have authority to unilaterally approve and fund “pet” projects, Projects are launched regardless of the availability of resources, When a goal is achieved the expected improvement is not achieved and No linkage between projects and strategy. This challenges that arises in software project management is a serious situation and should be taken care of and should be prioritized in order to have an unsurpassed software project management result.

1.2 Objectives

The following are the objectives of the research study:

- To be able to know the probably application and technology tactics for project management resources
- To be able to understand the resource deprivation
- To be able to identify the causes that leads to resource deprivation
- To be able to acquire more knowledge in the solutions for resource deprivation
- To learn more about the planning and providing software projects with sufficient resources, strategies and goals

1.3 Issue

In managing a project, success is not that painless to accomplish. Challenges may arise from beginning. There are different issues that are involved in software project management and one of these is the resource deprivation.

Lack of resources, or the lack of right skills no matter which can affect the project deliverables. Hence it becomes very crucial to allocate the correct number of resources and the right skill required to deliver the job.

The most challenging job for the project manager is recruiting internal skilled personnel. The competent workers are almost always very heavily involved with other projects.

Project Managers should have a plan on the types of skilled resources necessary to accomplish the planned work. Project managers should clearly submit resource requests well ahead and weekly updated management and the sponsor about the upcoming risks associated with the resource scarcity.

In this generation, technology has led us to a better and easier way to do task and things. But managing software projects wouldn't be that easier. The Information Technology has affected the general public and its environment in a number of ways. In many societies, technology has helped develop more highly developed organizations. Technology is not something like an enchantment that will immediately change an organization and remedy all educational obstructions to change. There are things or activities that we can't just change. In implementing a strategy, challenges may occur.

Software development is a difficult process involving such activities. In order to have an unsurpassed outcome, resource allocation is important. In every situation, unexpected disasters or problems may occur. That's why people who are involved in a certain software project management need not only to be intelligent but also to be wise in order to provide solutions.

Plan implementation is the process of changing strategic intentions into actions, then into satisfactory results. Successful plan implementation is as critical and difficult as the strategic choice. It requires reflection of the resources

to be used, people resource requirements, equipments, systems, time and other variables.

One of the most significant resources to a project is the human resource or what we call the project team. In a software project, the projects involve detailed skill at specific activities in the schedule, and also there are different phases in a project, different skills are needed in order to build the software project as a team. A member of a project can have one or more project but that person also has a limitation in which not all available projects can be worked on by that employee. Members of the team have their own skills and expertise. Furthermore, projects often require the knowledge and the resources that can be getting hold of using a contract. Obtaining and coordinating human resources, in tandem with organizing the time portion of the project, is significant to the projects full success.

Time management is significant, lacking of time and planned schedule may lead a project to failure. Time management is a seriously important skill for any project manager. Project Managers who happen as expected in meeting their project schedule have a fine chance of staying within their project budget. One of the common causes of failed project budgets is lack of schedule management. Any project can be broken down into a number of tasks that is needed to be performed. In preparing the project schedule, the project manager needs to know what the tasks are, how long will these tasks take, what resources are needed, and in what order things should be done.

There are different issues involved in software project management but resource deprivation is one of the top issues. As resources is composed of human resource, money, equipments, time and many resources. It is not easy to handle lack of resources, once the software project lacked resources, this may cause a project to not succeed. It is important to gain more knowledge about deprivation of resources in order to provide solutions.

There are different resources involved in a software project such as the human resource, equipments, money, time resource and many other resources. With these resources, deprivation occurs. Human resource is one of the major

resources that work on for a certain software project to occur. Money is an important resource, how would a project start if there are no people who will fund the project. Time management is needed, meeting the deadline is important because the more the project operates, the bigger fund is needed. Tools or equipments is an essential, it is used to make software projects easier and better to do but sometimes project fail because they lack tools that are needed in order for the software project to start and operate.

1.4 Scope

The research focuses on the resource deprivation of software project management. The study will get information about the issue in resource deprivation from any source as long as it contributes to the research.

1.5 Terms

The following terms are provided to be able to understand more the study:

Activity

An element of work performed throughout the course of a project. An activity normally has an expected duration, an expected cost, and expected resource requirements. Activities are often subdivided into tasks.

Activity delay

The greatest amount of time that an activity can be delayed due to lack of resources.

Activity priority

A priority value assigned to activities to supply an ordering for activities that are waiting for resources.

Alternative analysis

Alternative analysis means considering some different options for how you assign resources.

Budget

A budget is a quantitative expression of a plan for a defined period of time. It may include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. It expresses strategic plans of business units, organizations, activities or events in quantifiable terms.

Bottom-up estimating

Bottom-up estimating means breaking down complex activities into pieces and working out the resource coursework for each piece.

Client / Customers

The person or group that is the direct recipient of a project or service is the client / customer. These are the people for whom the project is being undertaken. In many organizations, internal beneficiaries are called "clients" and external beneficiaries are called "customers," but this is not a hard and fast rule.

Constraint

Constraints are restrictions that are outside the control of the project team and need to be managed around. They are not necessarily problems. However, the project manager should be aware of constraints because they represent limitations that the project must carry out within.

Critical path

The series of activities of a project that determines the earliest completion of the project. The critical path generally changes from time to time as activities are completed ahead of or behind schedule. The critical path is usually defined as those activities with total float less than or equal to zero.

Deliverable

A deliverable is any tangible outcome that is produced by the project. All projects create deliverables. These can be documents, plans, computer systems, buildings, aircraft, etc. Internal deliverables are produced as a consequence of executing the project and are usually needed only by the project team. External deliverables are those that are created for customers and stakeholders. Certain project may produce one or many deliverables.

Deprivation

Deprivation is the state of not having something that individuals need or the state of being deprived of something.

Expert judgment

Expert judgment means bringing in experts who have completed this sort of work before and getting their opinions on what resources are needed.

Equipment

Tools that are used in particular fields or activities may have dissimilar designations.

Financial Plan

A financial plan is a sequence of steps or goals used by an individual or business, the progressive and cumulative attainment of which is designed to accomplish a financial objective or set of circumstances.

Gantt chart

A graphic symbol of work activities shown by a time-scaled bar chart.

Human Skill

Human skills are also referred to as skill management. This is the capability to understand others, develop interpersonal relationships, as well as organize and manage time effectively. Human skills are used most often to define what characteristics a company is searching for in an employee who will fill a management position.

Human Resource

Human resources are the set of persons who make up the workforce of an organization. Human capital is now and then used synonymously with human resources, although human capital typically refers to a more narrow view.

Implementation

Implementation is the awareness of an application, or execution of a plan, idea, model, design, specification, standard, algorithm, or policy.

Issue

An issue is a major problem that will slow down the progress of the project and that can't be resolved by the project manager and project team without outside help. Project managers should proactively deal with issues through a defined issues management process.

Lack

Lack is the state of being without or not having sufficient of something.

Program

A program is the umbrella structure established to direct a series of related projects. The program does not produce any project deliverables. The project teams produce them all. The purpose of the program is to provide overall direction and guidance, to make sure the related projects are communicating effectively, to give a central point of contact and focus for the client and the project teams, and to determine how individual projects should be defined to ensure that all the work gets completed successfully.

Project

A project represents a planned undertaking that is planned to yield a very specific set of results through a documented and ordered set of time sensitive activities or actions that are often somehow dependent on each other.

Project duration

Duration of a project's terminal element is the figure of calendar periods it takes from the time the execution of element starts to the moment it is completed.

Project Management

Project management is the regulation of planning, organizing, motivating, and controlling resources to achieve specific goals.

Project Management Software

Project management software such as Microsoft project will often have features designed to help project managers estimate resource needs and constraints and find the best arrangement of assignments for the project.

Project Manager

A project manager is a proficient person in the field of project management. Project managers can have the responsibility of the planning, execution and closing of any project.

Project Schedule

Project Schedule is a listing of a project's milestones, activities, and deliverables, usually with intentional start and finish dates. Those items are often estimated in terms of resource allocation, budget and duration, linked by dependencies and scheduled events.

Published estimating

Published estimating data is something that project managers in a lot of industries use to help them figure out how many resources they need.

Resource

A resource is a source or supply from which benefit is produced. Typically resources are materials, money, services, staff, or other assets that are transformed to produce benefit and in the process may be consumed or made out of stock.

Resource Allocation

A resource allocation is the preparation of activities and the resources required by those activities while taking into consideration both the resource availability and the project time.

Resource Management

In organizational studies, resource management is the proficient and effective deployment of an organization's resources when they are needed. Such resources may include financial resources, inventory, human skills, production resources, or information technology.

Scarcity

Scarcity is the fundamental economic problem of having seemingly infinite human wants and needs in a world of limited resources. It states that society has insufficient productive resources to fulfil all human wants and needs.

Strategy

Strategy is a high level plan to attain one or more goals under conditions of uncertainty.

Target date

A date used to restrain the start or finish of an activity. The type of restraint is identified by an alignment type.

Task

Task is an activity that needs to be accomplished within a defined period of time or by a deadline.

Time Management

Time management is the act or process of planning and exercising conscious control over the amount of time spent on specific activities, especially to increase effectiveness, competence or productivity.