ACS 567 – Software Project Management

Spring 2009 – Kalyan Govindu

PMBOK Knowledge Area : Project Time Management

"Time, the driver"

There is a substantial amount of software out there in the market place to manage once project schedule and timeline. Most bigger projects fail due to the lack of schedule management rather than anything else.

Any project can be broken down into a number of tasks that have to be performed. To prepare the project schedule, the project manager (PM) has to figure out what the tasks are, how long they will take, what resources/people they require, and the sequence in which they should be done. Each of these elements has a direct bearing on the schedule.

All of these task should and will have a time estimate associated with them. In current days, we have an iterative approach to the deliverable. So lets say an iteration is a about an month for a project. It should be pretty straight forward to calculate roughly home many resources are available and to what capacity. From that we should be able to obtain the number of available hours of work that can be completed. It is important to remember that there is a relationship between the resources and task, as well that needs to be taken into account, when doing such work. The relationship is if a resource is a web designer, that resource cannot be allocated the same way as the other development resources.

Now that we have total available resource hours and estimated hours associated with each task. it enables use to put these two together, all the time maintaining the sequence of task, they can be assigned to iterations. So what ever does not fit

into the first iteration will move on to subsequent iteration and so on.

Once all the task are assigned and put into one iteration or another, we should have a timeline. It might be useful to understand that this timeline will be adjusted after each iteration based on the tasks completed and the error rate of the estimates for the tasks.

When all tasks have been listed, resourced, and sequenced, you will see that some tasks have a little flexibility in their required start and finish date. This is called float. Other tasks have no flexibility, zero float. A line through all the tasks with zero float is called the critical path. All tasks on this path, and there can be multiple, parallel paths, must be completed on time if the project is to be completed on time. The Project Manager's key time management task is to manage the critical path.