

Learning Journal Week – 3 (Week 3 &4)

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Course: Software Project Management (SOEN – 6481)

Journal URL:

Dates Range of activities: 05-02-2025 to 20-02-2025

Date of the journal: 22-02-2025

Key Concepts Learned:

The journal holds the studies done over the period of two weeks as the previous week was scheduled for mid-term. The learning activity was carried to explore the topics of chapter 5, 6, 7 and 8 that deals with the concepts of Configuration Management (CM), Project Planning, Project Monitoring and Control and Project Closure respectively. Also, I revisited chapter 1 to 4 which was part of the mid-term exam.

- *Chapter 5* - Configuration Management or CM is the method of managing the development work and addition of features based on new changes and requirements through the concept of version controlling and storing the documentations necessary for the project justification in a standard approach.
- *Chapter 6* - Project planning deals with the strategies and the techniques such as CPM/PERT that are used to prepare a plan for the project development. Project plan also checks for two methods to identify the problem which are bottom-up approach and top-down approach.
- *Chapter 7* - Project Monitoring and Control is about how to control and monitor the progress of the project with certain metrics that are necessary to identify the deviations and issues in the project and work on resource, cost, and schedule optimization.
- *Chapter 8* - Project closure is about the standard protocols and steps to be followed before delivering the final project or solution to the customer. It mainly talks about archiving the necessary data related to the project and documentation for project specification and legal matters.

Application in Real Projects:

The key concepts learned above are the soul of the project management, it is the prime responsibility of every project manager to understand the concepts of project planning, monitor and control, configuration management and closure which he/she must use every day in the work for project success. Let us discuss some of the scenarios where the above concepts are applied in driving the projects.

- *Version control and Documentation:* This is where managers must store all the artifacts and documents, training, and knowledge transfer details along with the proper version management for the source code so that developers are aligned and know the progress of the project. Continuous Integration along with the detailed information about the task with developer information is necessary to understand the bad implementation that may cause issue after integration to the project source code.
- *Resource Allocation and Optimization:* Valuable and high paid resources that work in the project must be utilized properly and make use of his/her skills for the project. When a project is about to close or when the resource is no more required in development then the resource should be released and reallocated to another requirement. This results in optimal usage of resources.

- *Task progress and Status reports:* Managers must create status reports often after every iteration to identify the work progress and check for any deviations or delays in the development of the project.
- *Risk and cost management:* Managers to check the risks that occur during the development that can be identified by the status reports that denotes the deviations if any in the project progress. Cost and resource optimization to be monitored after every iteration of the agile method.
- *Creating CPM/PERT:* Implementing CPM/PERT helps managers in estimating the time and effort along with the task dependency to develop independent tasks in parallel for time optimization and to avoid the delays.
- *Project closure:* Managers should follow the standard procedure for project closure where in the manager and the team should identify the right version of the source code with all the objectives achieved to be delivered. Managers should store all the necessary artifacts and documents along with the right source code and should get a sign off from the clients to close and deliver the project and plan for resource and tools release.

The mentioned concepts are a few scenarios where the above learnt key concepts are utilised in real world and which are having high importance where every project manager should have undergone the situations where these scenarios helped in driving the project and tackling the issues.

Peer Interactions:

- Due to the undesired weather condition the project pitch where we were supposed to give a project pitch on our project idea was postponed to a later date, I was not able to have a better peer interaction. Although, I was able to connect with my co-ordinator and explain our project pitch as a team and took feedback and improvisations that can be made.
- Exam: As part of the mid-term exam, I was having discussion with my friends and colleagues where in we discussed the concepts that are part of the mid exam curriculum. We discussed the concepts of risk assessment, project planning where in understanding the fundamentals and techniques were challenging to understand especially the importance of CPM/PERT methods that determined the project duration and effort.
- Project: For the project progress, the next deliverable is to deliver a detailed report that basically deals with 5 concepts of project management that includes budgeting, risk assessment, project plan, solution proposed and feasibility. Me and my team had a long conversation of identifying the potential risks, proper budget analysis which was more challenging and considered in designing a robust and flexible solution design.

Challenges Faced:

After reading through the chapter 5 to 8 and revisiting the chapter 1 to 4, I was able to clearly understand the proper structure and the pipeline of processes that are to be followed for a successful project management and driving the project development by reducing the risk of delays and deviations.

Although there were a few key points that were difficult to analyse initially and had needed an extensive study to understand them. Some of such concepts are:

- For the exam the risk management techniques were quite tricky to analyse especially the balancing act along with the estimation technique calculations.
- For the project, the project plan was the most tedious task as it involved proper analysis of the scope and determining the structure for the project flow and assigning the time and effort for each iteration.
- In the chapter project monitoring and control, the metrics, and the graph to understand the monitoring metrics was also proved to be difficult wherein I had to put extra effort by learning out of the textbook to understand and do the analysis by myself.

- Although, the project closure and configuration management chapters very slightly easier when compared yet they had some critical points that cannot be neglected such as the folder hierarchy and detailed information structure of the document and the documents' structure that needs to be followed to store them during the project closure.

Personal Development Activities:

For the personal development, as mentioned previously I am trying to solve the questions and exercises provided at the end of each chapter and trying to find some resources online regarding the chapter learnt to understand how the topics have evolved over the time from the date the textbook was published. Finding new inputs that were added in the project management domain.

As for the project, these two weeks study was a game changer as it solved major questions, I had in terms of project plan and feasibility study. I was able to understand and opt the right set of methods to implement the project such as the method of implementation, the time and effort required for each component such as design, development, and testing. Further, it was clear for me to create a proper project plan so that the development would not deviate from the actual goal and objective.

Goals for the Next Week:

For the upcoming weeks, I want to learn the next 2-3 chapters (9,10,11) and follow the same routine as I did previously and understand the new concepts under software project management. Regarding the project, I wish to complete the reports for the project and have a peer review to get feedback and discuss the same with my mentor before the submission. After all this, I want to explore the latest topics of the project management out of the book.