

## Learning Journal Week - 2

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**Course:** Software Project Management (SOEN – 6481)

**Journal URL:**

**Dates Range of activities:** 22-01-2025 to 03-02-2025

**Date of the journal:** 04-02-2025

### Key Concepts Learned:

This week the learning was based on chapter 3 and 4 of the textbook, that mainly deals with the Software Projects effort and cost estimation and Risk management respectively.

Chapter 3 majorly focuses on standard techniques that are used in the industry for effort and cost estimation for a software project. Some of the estimation techniques that are discussed are COCOMO (*COnstructive Cost Model*), Function Point Analysis (FPA) and Wide Band Delphi. Each estimation is suitable for a particular scenario where in the current project details are well defined but previous data not available, previous project data are available but current project data is not well defined and where both the data are available. Further the chapter describes the effort estimation procedure for waterfall model-based planning and for iterative model-based planning. Later, author discuss about the cost, schedule and resource estimation in a software project and its significance in product development.

Chapter 4 is all about Risk Management that mainly discuss about the factor that cause the risks, followed by the categories of risks and analysis for the risk and the balancing act to maintain the risk minimality in the project. Later risk management in agile method is explicitly discussed with artifacts and practical considerations that are to be done for risk management are briefly discussed.

### Application in Real Projects:

The key concepts learned above can be seen around. Every project right from a hardware perspective such as supply chain to construction, to a software perspective as software development to services holds the concept of cost estimation and risk management. General idea behind the cost estimation is to consider the effort shown by a person to do a task and the amount of time he/she has spent to complete the work for a certain amount of time which can be termed as person month which is a metric to analyse the work effort and award with the compensation to that. On the other hand, risk management is the process of managing the risk or malfunction of the software or the product due to various reasons such as poor development or edge cases that cause the software to malfunction. These risks should be analysed often during the implementation phase and try to avoid them or keep them the minimalist so that it would not affect the product or software performance.

### Peer Interactions:

This week a lot of actions were undertaken as part of the peer work. Initially had an opportunity to work with one of my colleague as a team of two on the topic analysis seminar where we were to analyse a topic in the software project management perspective and give a seminar on the analysis made. Later

the project that is part of the course had the phase 1 deliverable where in the project initiation and market analysis was to be done on the topic chosen. Had a regular conversation with the team of four wherein we were analysing each other idea regarding the project title and their research on the same. Finally, we were able to do the document on project analysis and market analysis and feasibility study on the project. To add, I was able to meet new friends during the class and talked more about the subject matters.

### **Challenges Faced:**

The major challenges that I faced in chapter 3 and 4 include the effort and cost estimation that includes more logical analysis and estimations based on criteria and formulas which includes identifying the right estimation approach from COCOMO to delphi techniques and to determine the right developmental model. In the risk management most of the concepts were comprehensible but need extra learning on how to tackle such scenarios. Looked for a research paper that discuss about risk management in detail and was able to understand the concepts.

### **Personal Development Activities:**

For the week to develop my understanding on the subject, I went through the textbook chapter 3 and 4 especially the case studies that gives the real time scenario that majorly focuses on the topics discussed in the chapter. Was able to understand and answer the questions provided at the end of chapter 3 and 4. Started looking for research papers and articles on the topics learnt to understand the scenarios and problems in project management where the concepts are used to solve the issues. Studied a paper that talked about the risk management.

### **Goals for the Next Week:**

In the upcoming week, I aim to continue my pace and study chapter 5, 6 and 7, and understand the information provided in the chapters and analyse them as I did with the previous chapters. Also, I try to interact with more colleagues and discuss the concepts and learning that I have done with the subject and progress in my work in the project with team members.