

## Learning Journal Week#2

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**Course:** SOEN6841 Software Project Management

**Journal URL:** <https://github.com/ads2602/SOEN-6841-Software-Project-Management-W25>

**Dates Range of activities:** 20/01/2025 to 02/02/2025

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

### Key Concepts Learned:

This week, we started two new chapters, focusing on Effort & Cost Estimation (Chapter 3) and Risk Management (Chapter 4). These concepts are essential in ensuring projects are planned effectively, resources are allocated efficiently, and risks are mitigated to avoid potential failures.

I began learning about effort and cost estimation, which is a fundamental process in determining how much time, resources, and money will be required for a project. I explored different estimation techniques such as Function Point Analysis (FPA), COCOMO, and Wideband Delphi, understanding how these models help in predicting project costs and effort requirements. It was particularly interesting to see how function points measure software size and how historical data is used in analogy-based estimation to forecast new project effort. The Wideband Delphi technique was also a unique approach, as it involves expert judgment and collaborative estimation, refining accuracy through multiple discussions.

Following this, I learned about risk management and its impact on project success. Risk is an inevitable factor in project management, and I now understand how crucial it is to identify, analyse, and mitigate risks before they escalate. The concept of risk probability and impact assessment was something new, where risks are prioritized based on their likelihood and severity. I also studied different risk response strategies, such as avoidance, mitigation, transfer, and acceptance, each providing a unique way to handle potential uncertainties in a project. Another key takeaway was how risk management frameworks like risk registers and matrices are used in real-world projects to monitor and control risks effectively. We also made our topic analysis on the topic how to initiate a low priority project where I had to learn what is its definition different ways to identify them and various ways to initiate them.

### Application in real projects:

The concepts that I learned helped me gain insights into how cost estimation and risk management are applied in real-world software projects. Understanding how software companies use estimation techniques to allocate budgets and how businesses manage risks in large-scale IT projects was helpful in seeing the practical applications of these theoretical concepts. The role of Agile methodologies in continuous estimation and risk assessment was particularly interesting, as it highlighted the importance of flexibility and adaptation in modern software development.

### Peer Interactions:

I engaged in discussion with a classmate who worked in Agile environments, where we talked about how configuration management (CM) tools like Git are used to track changes and maintain version control. Understanding how teams manage software configurations to avoid integration issues was an insightful takeaway. Within our own project group, we brainstormed on project topic

and decided on the topic, we also did the market analysis and discussed different risk-related scenarios, discussing real-life cases where poor risk management led to project failures.

**Challenges Faced:**

Challenges I faced this week was determining which estimation model works best for different project types. While COCOMO works well for structured, well-documented projects, Wideband Delphi is more suitable for Agile environments where flexibility is needed. Another challenge was distinguishing between risk mitigation and risk transference in practical cases, as both approaches have pros and cons depending on project context. We also made our topic analysis on the topic how to initiate a low priority project where I had to learn what is its definition different ways to identify them and various ways to initiate them.

**Personal development activities:**

Went through the textbook mentioned, the chapters 3 and 4 to begin with solved a few questions and tried to understand the real life example given in the book, it was quite interesting style of studying. Also worked on several other things like researched for the topic analysis as well as performed market analysis for the project topic.

**Goals for the Next Week:**

In the next coming week, I wish to perform all the necessary tasks to have a clear idea about how we would go forward with our project and how we would do all the estimations and risk assessment techniques on our project how we would implement those. Also, I would be going through the next chapters of the textbook either before or after the lecture as I am not sure about what we would be going forward with.