**Learning Journal: Chapter 1, 2 and 3**

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**Course:** Software Project Management [SOEN 6841]

**Journal URL:**

<https://github.com/meet0208/SOEN_6841/blob/main/Learning_journal_1_SOEN6481_40294571.pdf>

**Dates Rage of activities:** 16-January-2025 to 28-January-2025

**Date of the journal:** 28-January-2025

**Key Concepts Learned:**

* Focused on different processes and subprocesses for the management of software projects, underlining the importance of how people, tools, processes, and technology all go into bringing the project to a good end.
* Learned the attributes of a good project manager and how leadership ensures that a project goes through with success.
* Gained knowledge on project scope and objectives, why they are important, and how they relate to the overall goals of the undertaking.
* Techniques for effort estimation (e.g., Function Point Analysis, Wideband Delphi, Estimation by Analogy).
* Cost estimation based on effort and parameters like hourly wages.

Overall, the session provided a basic understanding of project management principles, particularly in the context of software development. The session went into details on the creation of a project charter, scope management, and metrics that are specific to software, which shows how important effective planning and initiation are.

**Application in Real Projects:**

* Understand what project scope involves, the characteristics that show a good project manager, and the integration of people, processes, tools, and technology.
* **Challenges:** Faced resistance to change in adopting integrated processes, team dynamic conflict, and frequent training in new tools or methodologies.
* Applied concepts on the initiation of the project, including the implementation of project charters, scope, and clear objectives.
* **Challenges:** Faced problems with obtaining initial accurate information, stakeholder expectation alignment, and the match of project objectives with organizational goals.
* Used Function Point Analysis to measure software functionality.
* Applied Estimation by Analogy to derive effort and cost for similar projects.

Projects, in the real world, are successfully completed by adapting to dynamic environments. The objectives can be achieved through effective communication and collaboration among team members. There is a need to balance rigidity in methodologies with flexibility to manage unforeseen issues.

**Peer Interactions:**

* Introduction sessions to identify and share experiences.
* Brainstorming on the conceptual aspects of software project management.
* Knowledge-sharing sessions on selected topics were conducted through Google Meet.
* Sessions on goal setting were held to align objectives of the group members.
* Collaborated on understanding Wideband Delphi through group discussions.
* Exchanged insights on adapting estimation techniques to diverse project types.

**Challenges Faced:**

* Initially did not clearly grasp the unique problems of software projects, such as invisible and adaptive characteristics.
* Needed more explanation regarding the adaptation of project management practices to such characteristics.
* Difficulty of complete definition of project scope so that all features and quality criteria were considered.
* Issues in developing the project charters, estimating the budget, and initial development of schedules of the projects which require further explanation for clarification.
* Difficulty in estimating effort for new technologies and complex projects.

**Personal Development Activities:**

* Further reading about issues peculiar to software projects concentrating on invisibility and flexibility challenges.
* A web-based workshop on adaptive management techniques for a project manager to overcome such challenges.
* Take an online workshop related to the definition and communication of project scope to enhance the core competencies required to perform the project work.
* Researched advanced algorithmic models like COCOMO.

**Next Week Goals:**

* Understand how project management methodologies could be adapted to meet challenges posed by software projects.
* Facilitate enhancement of knowledge on building a well-defined project charter through studied and applied lessons.
* This means that, when applying SMART criteria to setting project objectives, these should be both measurable and realistic.
* Refine understanding of estimation techniques through hands-on examples.
* Participate in a group exercise on resource allocation and cost estimation.