Learning Journal 3

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Course: SOEN 6841 Software Project Management

Journal URL: https://github.com/Muqaddaspreet/SPM_Journals.git

Dates Rage of activities: 4th October 2024 to 25th October 2024

Date of the journal: 26th October 2024

Week 5

Key Concepts Learned:

- **Importance of Project Planning**: It spans from the initial concept to the system delivery and serves as the foundation for subsequent project phases. The ensures that all components are considered and documented in detail, such as scheduling, budgeting, resource allocation, and quality assurance.
- **Work Breakdown Structure (WBS)**: WBS is critical for decomposing the overall project into smaller, manageable tasks. It helps in establishing clear task relationships, defining which tasks are dependent on others.
- **Top-Down vs. Bottom-Up Planning**: The top-down planning method involves defining the project timeline first and then allocating durations for individual tasks within the main project timeline. On the other hand, the bottom-up approach assigns time to smaller tasks first and add them to form the overall timeline.
- **Scheduling Challenges**: Estimating task durations accurately is challenging due to factors such as varying task complexities, unforeseen difficulties, and resource constraints. Also, adding more people to a task may not proportionally reduce its completion time due to communication overheads.

Application in Real Projects:

- The planning techniques studied were directly applicable to my project tasks, such as mapping out a study schedule for Quiz 2 and mid-term exam and establishing a timeline for content review and practice. This experience mirrored the real-world approach of breaking down project phases using WBS and allocating resources like time for efficient task completion.
- In addition, the learning helped me reinforce the concept of scheduling dependencies. For example, understanding how one study topic needed to be completed before moving to the next helped ensure a structured learning flow, much like how dependent project tasks are managed. This technique proved to be beneficial in devising project plan for the phase II of the project.

Peer Interactions:

- Collaborated with peers to discuss and exchange effective project planning strategies. This engagement was beneficial for learning new methods to manage study schedules and reduce task dependencies.
- Engaged in discussions with peers to share study tips for Quiz 2 and mid-term exam. Insights were shared on time management and task breakdown for optimal preparation.

Challenges Faced:

- One significant challenge was estimating how much time I needed to dedicate to each sub-topic for mid-term exam preparation. This mirrored real-world difficulties in estimating task durations accurately in project management.
- Balancing study time across different chapters while ensuring comprehension posed a challenge.

Personal Development Activities:

- Extended my knowledge by reading case studies on real-world project planning failures and successes, which provided insights into the importance of robust planning and proactive risk management.
- Practiced making Gantt charts to visualize task timelines, strengthening my understanding of how visual tools can actually help in project schedule management.

Goals for the Next Week:

- Deepen understanding of project monitoring and control methods covered in Chapter 7.
- Continue applying project planning concepts to future assessments, focusing on improving my time estimation and scheduling skills.
- Prepare for the upcoming quiz covering Chapters 4 and 5, as well for the mid-term exam covering everything studied so far.

Week 6

Key Concepts Learned:

- **Significance of Monitoring**: Monitoring is crucial for maintaining project alignment with the initial plan and involves collecting real-time data on project progress and comparing it to the baseline plan to identify deviations.
- **Control Processes**: It ensures that the project is completed according to the planned schedule, cost, and quality metrics. It requires taking corrective actions when deviations occur, like re-planning activities or reallocating resources.
- **Earned Value Management (EVM)**: This tool integrates cost and schedule to provide a comprehensive view of project performance. It measures project progress in terms of value earned rather than just time elapsed or expenses incurred, helping project managers identify cost and schedule variances.
- **Corrective Actions and Risk Management**: Corrective actions can range from minor schedule adjustments to major project re-planning. Effective risk management involves continuous monitoring for potential risks and responding with appropriate strategies such as resource reallocation or re-sequencing tasks.
- **Performance Indicators and Metrics**: Metrics like schedule variance (SV) and cost variance (CV) are used to assess project performance. Decisions on whether to continue, adjust, or potentially abort a project based on its current trajectory are highly dependent on these.

Application in Real Projects:

- When preparing for the topic analysis report and developing the poster presentation, I applied the monitoring and control principles learned in Chapter 7. Tracking my preparation progress, comparing it against planned milestones, and adjusting timelines when necessary, mirrored the real-world use of EVM.

- The use of EVM concepts allowed me to assess my performance and time spent during the project, ensuring that I met the poster presentation deadline without compromising on quality.
- Preparing for the mid-term exam, I tracked the amount of time spent on each chapter and then compared the results with the length of the concepts in the chapter to formulate new insights.

Peer Interactions:

- Worked collaboratively with team members to prepare for the presentation. Discussed methods for presenting project status updates effectively, incorporating structured reporting and visual aids, such as progress charts, which were key in illustrating the main points of our analysis.
- Exchanged feedback on draft versions of the presentation, which helped refine our approach to data-backed communication with clear, concise messaging.

Challenges Faced:

- The most significant challenge was effectively using EVM to align my progress with the schedule for my report and presentation. This included interpreting project metrics like planned value (PV) and taking appropriate actions when minor discrepancies were identified.
- Another challenge was preparing for potential questions during the presentation, emphasizing the importance of anticipating risks and preparing mitigation strategies.

Personal Development Activities:

- Enhanced presentation skills by practicing with peers and integrating structured communication methods that align with the strategies outlined in my poster.
- Researched further on monitoring techniques and how they are implemented in iterative projects to understand how continuous monitoring supports project adaptability.

Goals for the Next Week:

- Explore advanced tools and software for project monitoring and control.
- Prepare for upcoming tasks that involve real-time project progress tracking, focusing on applying what I learned about project metrics and performance indicators.
- Learn more about project monitoring and control and their integration in healthcare to include it as part of the project.
- Continue working as part of the team on the phase II of the project.
- Prepare thoroughly for the mid-term to be scheduled on 28th October 2024.