**Learning Journal**

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**Course: SOEN 6841**  
**Date Range:** 21-28 January, 2025  
**Date of Entry:** 28th January

| **Key Concepts Learned** | This week, I explored software project management, focusing on project initiation, planning, execution, and risk management. Key insights included project scope, feasibility studies, stakeholder engagement, and digital transformation in government IT. I also studied cybersecurity risks, AI applications, and agile vs. waterfall methodologies while ensuring my reflections aligned with the learning journal template. |
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|  | Challenging Component: Analyzing external risks like technology obsolescence and vendor dependency was challenging, requiring risk mitigation strategies such as adaptive planning and supplier assessments. |
| **Application in Real Projects** | This week, I explored software project management and its real-world applications in software maintenance, project initiation, and execution. Effective planning ensures smooth software updates, cybersecurity risk management, and stakeholder engagement. |
|  | Challenging Component: A key challenge was managing cybersecurity risks in software projects, balancing security protocols with agile development without compromising speed or flexibility. I |
| **Peer Interactions & Collaboration** | Discussions covered project scope, iterative models, and cybersecurity, including agile vs. waterfall for large projects. I also collaborated on topic analysis and a poster presentation, improving research and communication skills. |
|  | Challenging Component: Peer insights helped me refine balancing business goals with technical feasibility, particularly in scope, timeline, and budget management. |

### **Challenges Faced**

1. One major challenge was keeping up with **new technologies** while making sure the software stays compatible with the latest frameworks.
2. Another challenge was ensuring **high-quality software** while working with **limited resources**, making **quality assurance** a key focus.

Solution: To overcome these challenges, I studied real-world examples, identified possible risks, and practiced feasibility assessments to improve cost estimates. I also explored efficient quality assurance methods to maintain software reliability without exceeding time and budget limits.

### **Personal Development Activities**

To strengthen my project management skills, I studied cost estimation techniques like Parametric Estimation Models to improve accuracy in project budgeting. I also reviewed case studies on technology obsolescence to understand strategies for managing outdated systems while ensuring compatibility with new frameworks. Additionally, I practiced feasibility assessments and quality assurance planning, helping me develop better approaches to maintaining high software quality within resource constraints.

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

1. Deepen knowledge of cost estimation techniques and their practical applications.
2. Explore agile methodologies in public sector projects to understand their effectiveness.
3. Study advanced risk management strategies, including contingency planning and mitigation techniques.

Challenging Component: I aim to connect these learning objectives with long-term career development, focusing on project management, IT governance, and digital transformation leadership.

### **Overall Organization & Reflection**

This week provided a structured approach to software project management, IT modernization, and risk assessment. Understanding project scope, risk factors, and stakeholder engagement was crucial. My biggest takeaway was that successful project execution depends on balancing adaptability with structured governance.

### **Overall Impression**

This journal reflects my learning progress, challenges, and real-world applications of software project management. Exploring government IT projects improved my understanding of digital transformation and risk management, while peer discussions and case studies enhanced my problem-solving skills. Working on book exercises and a poster presentation helped refine my analytical and communication abilities, making me more confident in applying project management strategies effectively.