Research Methods and Professional Practice Unit 12 Reflection

Description

This unit was the final unit of the Research Methods and Professional Practice module, focusing on project management and managing risk. The goals of this unit were to explore the principles of project management, project methodologies, and project life cycles, analyse how risks and constraints impact project outcomes, develop a risk management plan, understand how to implement effective change control processes to manage project scope and maintain quality, and learn how to integrate risk and change management strategies into projects.

For this unit, we were required to read chapters 1, 3, 6, and 11 from Project Management for Engineering, Business, and Technology (Nicholas & Steyn, 2020), A Guide to the Project Management Body of Knowledge (Project Management Institute, 2020), an article on project management (Hart, 2023), an article on project management using agile frameworks (Mircea, 2019), a webpage on Gantt Charts from the Association for Project Management (APM, 2023), and an article on AI for space traffic management (Manfletti et al., 2023).

The module reflection and e-portfolio were due in this unit and the only formative activity for this unit was the self-test quiz.

Feelings

Completing this final unit was both a rewarding and challenging experience. I felt a sense of accomplishment as I reflected on my progress throughout the module. However, I also experienced frustration due to inconsistencies between the reading lists provided on the learning platform and those outlined in the syllabus. This made it difficult to determine which materials were essential, leading to inefficiencies in my study process.

Despite this, I found the practical application of project management concepts engaging, especially in understanding risk management and change control processes. These topics provided valuable insights into real-world project implementation. However, I was slightly overwhelmed by the breadth of project management methodologies covered, as I had limited prior experience with structured project planning frameworks.

Evaluation

A key strength of this unit was its focus on practical project management principles, particularly risk assessment and mitigation strategies. The content was highly applicable to professional settings, and learning about different project management methodologies (e.g., Agile and Waterfall) helped me appreciate their use in different contexts. The readings from Nicholas and Steyn (2020) provided a solid theoretical foundation, while case studies illustrated how these methodologies are applied in real-world projects.

However, the lack of structured formative activities meant there was minimal opportunity to receive feedback before the final submission. Additionally, the inconsistencies in the reading materials created confusion, which could have been avoided with better alignment between the syllabus and the online platform. The self-test quiz was useful for reinforcing key concepts but did not provide a comprehensive assessment of my understanding.

Analysis

The challenges I faced in this unit highlighted the importance of effective time management and information synthesis. The discrepancies in the reading list reinforced the need for independent verification of resources, a skill that is essential for any research-driven work. The emphasis on risk management also provided a deeper understanding of proactive decision-making, which is crucial in project execution.

A key learning point was the realization that project risks are not always negative—some risks present opportunities that, if managed correctly, can lead to innovation and competitive advantage (Project Management Institute, 2020). This perspective changed how I viewed risk management, shifting my focus from risk avoidance to risk optimization.

Additionally, the introduction to Gantt charts (APM, 2023) and Agile methodologies (Mircea, 2019) was particularly useful. These tools will be valuable in future research and professional projects, allowing for better organization and adaptability.

Conclusion

This unit provided a strong foundation in project management, highlighting the importance of structured planning, risk assessment, and change management. While I successfully engaged with the content, there were areas where I could have improved, such as dedicating more time to exploring specific project management software tools.

Moving forward, I aim to refine my project planning and risk management skills by applying these concepts in real-world settings. The inconsistencies in the reading lists also taught me the importance of cross-referencing academic materials to ensure I am accessing the most relevant and up-to-date information.

Action plan

To build on the knowledge and skills gained in this unit, I will take several strategic actions to strengthen my project management and risk assessment abilities. First, I will deepen my understanding of project management software tools such as Jira. These tools are essential for task management, scheduling, and tracking risks, which will be beneficial for both academic and professional projects. By completing online tutorials and applying these tools to personal or collaborative projects, I aim to enhance my ability to organise tasks efficiently and monitor project progress effectively.

A key takeaway from this unit was the importance of risk management in project execution. To further develop this skill, I will practice identifying, categorizing, and mitigating risks by using frameworks such as the Risk Breakdown Structure (RBS). I will also analyse case studies of successful and failed projects to understand how risk assessment impacts decision-making. Additionally, I plan to explore risk management certifications, such as the PMI Risk Management Professional (PMI-RMP), to gain a more structured approach to handling project uncertainties.

Time management is another critical area for improvement. Throughout this module, I faced challenges in balancing multiple assignments, especially when reading lists were inconsistent. To address this, I will implement time-blocking techniques and make use of Gantt charts to structure my workload more effectively. This will ensure that I allocate sufficient time to research, writing, and reflection, reducing last-minute stress and improving the quality of my work.

Finally, I recognize the value of professional certifications in validating my skills and increasing employability. Over the next year, I will work towards obtaining a project management certification, such as the Certified Associate in Project Management (CAPM). These credentials will not only reinforce my theoretical knowledge but also provide practical frameworks for managing real-world projects successfully. By integrating these strategies into my professional development plan, I aim to apply the project management and risk management concepts learned in this unit effectively in my future career.

References

The Association for Project Management (APM). (2023) *What is a Gantt Chart?*

Gibbs, G. (1998) Learning by Doing: A guide to teaching and learning methods. Further Education Unit. Oxford Polytechnic: Oxford.

Hart, R (2023) All About Project Management. Available from: https://management.org/projectmanagement/index.htm#anchor440783 [Accessed 26th January 2025].

Nicholas, J.M. & Steyn, H., (2020) *Project management for engineering, business and technology.* Routledge.

Mircea, E. (2019) *Project Management using Agile Frameworks.*

Manfletti, C., Guimarães, M. and Soares, C. (2023) 'AI for space traffic management', *Journal of Space Safety Engineering*, 10(4), pp. 495–504. doi:10.1016/j.jsse.2023.08.007.

Project Management Institute. (2020) *A Guide to the Project Management Body of Knowledge PMBOK Guide, 7th Edition.* Newtown Square, PA: Project Management Institute.