Introduction

This report thoroughly reviews a university group project, discussing the various deliverables, techniques, and technologies utilised to ensure the project's success. The initiative included research on initiative Management Stakeholders, an evaluation of financial viability, and a critical assessment of project management methodologies. The iterative project management model was utilised throughout the project's life cycle to facilitate continuous refinement and collaboration. The project taught us the significance of teamwork, clear communication, utilising individual talents, and the value of diversity in problem-solving. To justify its selection for this specific project, the iterative model was contrasted with other methodologies, such as Agile, Waterfall, and PRINCE2.

Description of the Coursework

Deliverable 1 required research on Project Management Stakeholders, information synthesis, and the creation of an informative PowerPoint presentation. The process involved taking detailed notes and incorporating them into the presentation, followed by the addition of audio narration to enhance the learning experience. The second deliverable examined the financial viability and profitability of a seven-year e-commerce project for Motor Factor UK. The Net Present Value calculations were utilised to determine whether the company should move forward with the undertaking, considering both costs and potential benefits. The third deliverable was a Joint Reflective Review that provided a comprehensive overview of the project, including an analysis of the project management methodologies used, lessons learned, and comparisons to alternative approaches. As previously described, Deliverable 4 provided evidence of coursework management by demonstrating the team's application of class-learned project management tools and techniques, as well as documentation of regular team meetings and collaboration throughout the duration of the project.

Critical Evaluation of Project Management Methodology

The iterative project management model was used to facilitate the successful completion of the designated deliverables in this university group project. This strategy was selected due to its compatibility with the project's characteristics, which required continuous evaluation, adaptation, and teamwork.

The cyclical and incremental nature of the iterative model enables the project to be divided into smaller, more manageable segments. This allowed for the early identification and resolution of potential problems, resulting in increased efficiency and a decreased risk of errors. Regular weekly meetings were held, allowing the team to re-evaluate and modify their plans for the following week based on the progress made and any obstacles encountered.

The iterative model facilitated a clear division of responsibilities and ensured that all aspects of the project were addressed in a timely and effective manner by assigning each team member a specific deliverable to work on. This approach's iterative nature encouraged

constant communication and collaboration, allowing team members to share their expertise, provide feedback, and offer assistance throughout the duration of the project.

Moreover, the adaptability of the iterative model was well-suited to the dynamic nature of a university group project, as it enabled the team to modify and improve their work based on the project's changing needs and requirements. This adaptability ensured that the final deliverables were of high quality and met the project brief's specifications.

The iterative project management methodology proved to be a highly effective approach for this university group project, allowing for efficient collaboration, continuous development, and the successful completion of all deliverables. For this university group project, the iterative project management methodology proved to be a highly effective approach, allowing for efficient collaboration, continuous refinement, and the successful completion of all deliverables.

Project Management Techniques

Each of the deliverables for this university group assignment could not have been completed successfully without the use of various techniques. For the first deliverable, Google, textbooks, lecture notes, and lecture videos were used as primary sources of information. The team was able to collect pertinent and accurate data, which was then incorporated into the PowerPoint presentation thanks to this comprehensive strategy.

For Deliverable 2, financial mathematical formulas were used to evaluate the financial viability and profitability of the undertaking. This required calculating the Net Present Value and other key financial metrics to aid in making informed decisions. Project management methodologies played a vital role throughout the entirety of the undertaking, particularly for Deliverables 3 and 4. These methodologies included Project planning, Scope Management, Resource Management, Time Management, Change Management, Estimation Management, Risk Management, and Quality Management, amongst other key components.

Weekly meetings on Microsoft Teams facilitated team members' communication and collaboration, ensuring that tasks were effectively assigned, reassigned, and completed. Understand Scope management, we started defining the following objectives, tasks, outputs, and deadlines. This step helped each team member to clearly understand the team’s expectations and the limits of the project. In the first step, we created both a plan scope management and collected the requirements. Next, we proceeded to define the scope and thereafter created a work breakdown structure while controlling and validating the scope. Next, the importance of time management was highlighted by the fact that the assignment was assigned in advance, allowing the team to plan and work efficiently, and this was under activity-based planning. At this step, we started by defining and sequencing all the activities followed by an estimation of both resources and duration for these activities. Finally, we developed and controlled the schedule. Tools utilised at this step were the activity table and network diagram.

The emphasis of Resource Management was on designating responsibilities and redistributing team members to assist others as needed. Firstly, we started by forming a resource management plan and thereafter proceeded with estimating activity resources in order to get a sense of the exact amount needed. After that, we acquired the resources, developed a team and we began managing the developed teams while monitoring how the resources are being used. The critical path was the tool utilised at this step. Cost Management was not a significant factor because there were no project-related expenses. Team members reviewed each other's work, provided feedback, and suggested revisions as part of Quality Management. Quality Management was carried out by undertaking the following steps: quality planning, quality control, quality assurance, and quality improvement. This ensured that the final deliverables met the predetermined criteria.

Estimating Management assisted in estimating the time required to complete individual tasks, enabling the team to effectively allocate resources and meet deadlines. The first step we carried out here was to break down the entire project into small managed tasks for the group members to share. At this stage of the project management process, we started by identifying the required resources. For instance, we identified and estimated the number of people capable of carrying out specific tasks based on their skills and qualifications. The other thing we did was to establish and estimate how much time each specific task would require to be completed, from start to finish. This step allowed us to identify when and for how long we need to call upon the services of specific team members to carry out particular tasks. And it is important to note that this process was repeatedly done at different stages of the project management to ensure its accuracy. Lastly, we also estimated and established the cost of each task involved, then combined the individual costs to determine the total cost of the entire project. These estimations were done by striking a balance between underestimations and overestimations.

Risk Management was minimal, as achieving high grades was the priority. However, we started the risk management process by identifying all the risks surrounding the project. This is done by looking at the project holistically (in this case, all the project management stages). Examples of the risks we found were time crunch risk, risk of stretching resources, low-performance risk, risk of over or underestimation and many others. This was achieved by relooking at the various steps of the project management processes like critical path, estimates, resource management, time management, and assumptions we made. After identifying all the risk factors, we assessed them based on the likelihood of them occurring.

Next, we evaluated how we were exposed to these risks and established their impact on the overall outcomes of the project management task at hand. For instance, we simulated many scenarios in which we tried to see the impact of understating the costs of the resources on the project’s overall outcome. These steps helped us prepare and take the necessary steps to prevent them or reduce the impact of these risks on the project's ultimate goals. For instance, in the case of the stretched resources risk, this risk was mitigated by creating a resource allocation plan. A plan for resource allocation maximises resource impact, supports team

objectives, and makes the best use of team resources. Your chances of running out of resources later are reduced when you know what resources you need upfront.

Technologies

Microsoft Teams served as the platform for weekly group meetings, with its transcription function allowing the team to efficiently generate meeting minutes. The meetings were also archived using the recording feature for future reference.

1. Microsoft Word was used to compile the project's text-based duties, allowing for simple editing and formatting of the final documents.
2. Microsoft Excel proved indispensable for conducting financial viability and profit analysis calculations, as it provided a systematic and efficient method for managing large quantities of numerical data.
3. Microsoft PowerPoint was used to create the slides for Deliverable 1, incorporating audio narration to enhance the learning experience.
4. Microsoft Edge facilitated the perusing of PDF files during research, enabling seamless access to vital information from multiple sources.
5. Google Chrome was the preferred web browser for overall research, enabling the team to efficiently investigate a vast array of resources and collect pertinent data.
6. Microsoft Project provided the team with a fundamental comprehension of how real-world project management tools operate, as well as valuable insights into best practices and industry standards.

Lessons Learned

First, the significance of teamwork was emphasised, as the project's success depended significantly on each team member's ability to effectively contribute their skills and knowledge. The collaborative efforts of the team ensured that every aspect of the project was addressed promptly and effectively.

Maintaining a continuous flow of information and avoiding misunderstandings required open channels of communication. Regular meetings and open communication channels enabled the team to share updates, provide feedback, and request assistance as necessary. This openness contributed to a supportive and productive workplace.

Effective resource management required a thorough understanding of each team member's unique skill set and utilising their strengths accordingly. The team was able to optimise efficiency and produce high-quality deliverables by allocating tasks based on individual competencies.

The power of diversity was also evident throughout the duration of the project, as team members from diverse cultural, ethnic, and professional backgrounds contributed their unique perspectives and insights. This diversity enriched the group's collective

comprehension, allowing for more creative and comprehensive solutions to the encountered challenges.

Comparison with Other Approaches

Due to the nature of the tasks and the requirement for continuous evaluation and adaptation, the iterative model was selected for this university group project. Other methodologies, such as Agile, Waterfall, and PRINCE2, may not have been as suitable for this undertaking.

Agile is a highly adaptable methodology that emphasises collaboration and flexibility. While it has many benefits, its applicability to smaller academic endeavours may be limited due to the need for constant coordination and communication, which may not be feasible in a university setting. The Waterfall paradigm is linear and sequential, with each phase being completed before the next. This rigidity may not have been appropriate for this group project, as it would have restricted opportunities for reconsidering and refining the work considering changing needs and requirements.

PRINCE2 is a process-driven project management methodology that emphasises thorough planning, control, and documentation. While PRINCE2 provides a structured and detailed approach, it may be too complex and resource-intensive for a university group project, where the scope is lesser and the need for flexibility is greater. The iterative model proved to be the best option for this project, as it permitted continuous development, adaptation, and effective collaboration. Its suitability for academic environments and adaptability to the dynamic nature of the project made it a better fit than Agile, Waterfall, or PRINCE2.

Conclusion

Utilising the iterative project management model, a variety of research methodologies, and an array of technologies, the university group project was able to accomplish its goals. The initiative highlighted the significance of teamwork, communication, efficient resource allocation, and group acceptance of diversity. The iterative model proved to be the best match for this project due to its adaptability, continuous development, and efficient collaboration, making it superior to Agile, Waterfall, or PRINCE2 in terms of suitability. Overall, the project demonstrated the practical application of project management methodologies and the importance of collaboration and flexibility in attaining desired results.