**Case 1**

**Task 2**

The weighted scoring model includes 7 criteria. First, supporting key business objectives is the most important criterion and it weighs 25%. This is because all the projects aim at serving OEU’s strategic goals (expanding student base and providing improved education products). Second, providing positive net present value (NPV) and return on investment (ROI) has a weight at 20%. This is the second most important criterion because a high NPV indicates high profit, and a high ROI indicates high efficiency of an investment. The ability to generate profit is crucial for OEU’s business growth, and high profit implies a success in expanding student base as the profit mainly comes from students’ tuition fees. Third, it is desirable for a project to have low risk in meeting the goals of triple constraints (scope, time and cost). Although it does not directly support OEU’s business strategies, meeting these goals is vital for a successful project and low risk means a high possibility of completing the project within budget and on time. Thus, this criterion has a weight of 15% in the model. Fourth, having low cost weighs 10% because low project cost will lead to low tuition fees, which can attract more students and make OEU more competitive. Fifth, providing high-quality education products weighs 15%, which ranks the third because this feature helps to maintain student satisfaction and enables OEU to establish its reputation. It further attracts more students and continuously facilitates OEU’s business growth. Sixth, considering future development, the project needs to require minimal maintenance and support future upgrade. This weighs 5% as it is a preferable but non-essential feature. It supports OEU’s business goals by reducing maintenance cost and enabling continuous product improvement. Seventh, having high competitiveness involves providing unique education products in areas with less competition. This criterion weighs 10% because high competitiveness facilitates the expansion of customer (student) base. Although it is not as important as high-quality products, having less competitors and standing out from competitors is an indispensable criterion that needs to be considered when evaluating the projects.

By analysing the features and financial performance (as shown in Appendix A) of each project, the scores are given based on the seven criteria discussed above. From Figure 1 (as shown below), it is obvious that Project 1 is the best based on the weighted scoring model, and its score (81) is much higher than the other three projects (around 55). This project performs best in the two most important aspects (supporting key business objectives as well as providing positive NPV and ROI). In addition, it achieves high scores (above 70) from criterion C to criterion F because it maintains relatively high teaching quality by ensuring interactivity of classes while lowering cost and risk by running classes inside local community buildings. Although it only achieves average score (60) in having high competitiveness, it is an overall desirable project to serve OEU’s strategic goals. By contrast, Project 2 is advantageous in terms of low cost as well as easy maintenance and future upgrade, but its disadvantage is distinct in terms of compromised product quality and low competitiveness due to the nature of online courses. For Project 3 and Project 4, they provide the highest quality of teaching as classes are delivered in physical campuses, but they require much more investment ($50 million and $5.4 million respectively) due to the nature of physical campuses. Project 3 provides specialised degrees in communities where the need has not been met, which means there is minimal competition. Project 4 is also competitive due to OEU’s reputation. However, building and upgrading physical campuses requires enormous cost, and it also has high risk in terms of triple constraints as it may require more time and money than expected. Although the NPVs of Project 3 and Project 4 are much higher, the ROIs are relatively low, indicating inefficient investment. In addition, physical campuses require more maintenance and can be relatively difficult for future upgrade. Therefore, it is recommended that Project 1 should be chosen in order to facilitate OEU’s continuous growth.

Chart

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Figure 1. Weighted scoring model for 4 projects

Table

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Figure 2. Comparison of financial analysis among 4 projects (see calculations in Appendix A)

**Task 3**

**Business Case for Hybrid Campus**

**Date: 15/11/2021**

**Prepared by: Yidie Hu, Project Manager**

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| --- |
| 1. **Introduction/ Background**   The core business goal of Open Education University (OEU) is to provide various degree programmes in various countries. Considering the slow growth at its campuses, OEU management team decides to change its strategy to support continuous growth. The strategic goals focus more on expanding customer base of students and improving education products with technology. |
| **2.0 Business Objective**  OEU’s strategic goals include expanding the current customer base, providing a unique education product, improving cooperation between campuses and utilising technology for competitive advantage. The hybrid campus project will support these goals by establishing a central hub with studios to broadcast classes to many study centres via video conferencing, which enables economy of scale and lowers tuition fees. With study centres linked to a lecture, up to 500 students can attend the same lecture from different locations. This feature supports expanded customer base and also ensures cooperation between campuses in terms of product offerings, sharing of resources, knowledge and research. The lectures still maintain interactivity, thus achieving higher quality than other online courses. The internal costs will be reduced by lower rent cost (by establishing study centres in local community buildings) and no additional costs for developing course materials (by using the same materials as other campuses), which enables OEU to lower tuition fees to attract more students. |
| **3.0 Current Situation and Problem/Opportunity Statement**  OEU has 20 campuses in North America, Australia and Europe, and it has over 9000 full-time employees and 3500 freelance workers. The problem is that OEU is experiencing slowed growth at its campuses. However, due to rapid growth and development of information technology worldwide, the solution can be that online courses and physical classes are combined when improving the growth at its campuses. Building new physical campuses and upgrading current campuses can also provide opportunities to grow its campuses and meet OEU’s strategic goals. |
| **4.0 Critical Assumption and Constraints**  The proposed hybrid campuses must be valuable assets for OEU. Current employees, clients (students) and local communities must actively support the project, and this new mode of teaching must operate under a framework of government laws and regulations. The project manager must lead the effort, and the project team must include participants from several parts of the university as well as from local communities where study centres will be built. The video conferencing technology for delivering lectures should be stable and require minimal technical support. The online assignment submission system should be easily accessible, reliable and user-friendly to both students and lecturers. |
| **5.0 Analysis of Option and Recommendation**  There are four options for addressing this problem (slowed campus growth):   1. Create a hybrid university which will contain a central hub with studios to broadcast classes via video conferencing technology to many study centres located in local communities. 2. Create completely online courses to deliver complete degrees. 3. Create new physical campuses to provide specialised degrees in the areas where higher education demand is not met. 4. Upgrade current campuses in terms of capacity and technology.   Based on discussions with stakeholders, we believe that option 1 is the best. |
| **6.0 Preliminary Project Requirements**  The main features of the hybrid campus project include the following:   1. A studio to broadcast classes to different study centres with video conferencing technology. 2. Two-way video conferencing class in each study centre. The lecturer must be able to see all students in all classes and students must be able to ask questions. 3. Each lecture linked to up to ten study centres in order to hold up to 500 students per lecture. 4. Physical classes for students to attend in study centres, with a centre manager responsible for discipline and administrative duties. 5. Physical tests and exams at study centres, which will be scanned and sent to lecturers for marking. 6. Online system for submitting assignments. 7. The accessibility of course materials used at other campuses. Students at hybrid campuses should use the same materials as at other campuses, which ensures cooperation between campuses. |
| **7.0 Budget Estimate and Financial Analysis**  A preliminary estimate of costs for the entire project is $700,000. First, establishing a studio will cost $400,000, and it is assumed that there are no building costs for the studio. Second, all 10 study centres will be established in buildings belonging to local communities and they need to be equipped, at a cost of $30,000 each. Thus, equipping 10 study centres will cost $300,000 in total. As for the costs for developing course materials, this project will not involve any additional costs in this aspect.  An estimate of projected benefits is $1,450,000 and it is based on the assumption that there will be increase in profits due to an expanded customer base of students as economy of scale will be enabled (up to 500 students per lecture). With the improved education products supported by improved technologies, the business will gain increased profits. The projected benefit of the first year is $200,000, which increases to $500,000 in the second year and $750,000 in the third year.  Exhibit A summarises the estimated costs and benefits in each year and in total. It also shows the estimated net present value (NPV), return on investment (ROI) and the year when payback occurs. The assumptions made in performing this financial analysis are provided as well. All financial estimates indicate this project is good. The NPV is $551,268.12 and the discounted ROI based on a three-year system life is high at 87.20%. The estimated payback is relatively short (within two years). |
| **8.0 Schedule Estimate**  The sponsor (OEU’s CEO) expects that most parts of the project will be completed and new students will study in the hybrid campuses within a year, but there is some flexibility in the schedule. We also assume that the new hybrid campuses will have a useful life of at least three years. |
| **9.0 Potential Risks**  This project has several risks. First, the foremost risk is a lack of interest in hybrid campuses by internal lecturers and external students. Conducting a two-way video conferencing class to up to 500 students can be a challenge to the lecturer because students may ask many questions and the lecturer may have difficulty in balancing courses to be delivered and questions to be answered. The hybrid campuses may not attract many new students due to lack of face-to-face support by teaching staff and lack of campus activities such as societies and volunteering activities. Second, there are some risks in renting local community buildings. The local communities may not agree to sign a lease contract for many years, so the hybrid campuses may fail if the community discontinues the lease. Also, there may be some equipment installation issues due to the current building structure. Third, there are some technical risks as the hybrid campuses rely on video conferencing technology. If problems occur in the studios in the central hub, all study centres will lose connection to the lecture that is expected to be delivered. Fourth, the main business risk is investing time and money into this project but not realising the project goals and projected benefits. Fourth, there is a main business risk that the estimated benefits are not realised but a lot of time and money has been invested into the project. |
| **10.0 Exhibits**  Exhibit A: Financial Analysis  Graphical user interface, application, table  Description automatically generated |

Task 4

Project Charter

**Project Title**: Hybrid Campus (Phase 1) Project

**Project Start Date:** November 15, 2021

**Projected Finish Date:** November 15, 2022

**Budget Information:** The directors of OEU have approved to allocate $700,000 for the Hybrid Campus project, and phase 1 will be allocated $460,000 in total, including establishing a studio ($400,000) and equipping 2 study centres ($30,000 \* 2 = $60,000).

**Project Manager:** Yidie Hu, 0410341536, yidiehu@oeu.com

**Project Objectives:** Hybrid Campus (Phase 1) aims at establishing a studio in Virginia, USA and equipping two study centres in Prato, Italy and Melbourne, Australia respectively. These objectives are expected to be completed within one year.

**Main Project Success Criteria:** The studio and study centres must meet all written specifications, and most importantly they must provide high-quality courses via video conferencing. The studio and study centres be completed on time (within one year) and within budget (within $460,000). The project must be able to attract more students sustainably. The CEO will formally approve the project with advice from other key stakeholders.

**Approach:**

* Negotiate with local communities in Plato and Melbourne regarding leasing buildings within one month.
* Within two months, develop a clear work breakdown structure, scope statement, and Gantt chart detailing the work required to complete the Hybrid Campus (phase 1) project.
* Purchase all required equipment (e.g. video screens, cameras and microphones) within three months.
* Outsource studio establishment from local companies in Virginia.
* Outsource equipment installation from local companies in Prato and Melbourne respectively.
* Hold weekly progress review meetings involving the core project team and the sponsor.
* Conduct thorough video conference testing per the approved test plans.

**Roles and Responsibilities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Organization/**  **Position** | **Contact Information** |
| Sponsor | David Ellis | OEU/CEO | davidellis@oeu.com |
| Project Manager | Yidie Hu | OEU/Manager | yidiehu@oeu.com |
| Team member | Will Wang | OEU/Technical expert | willwang@oeu.com |
| Team member | Alice Brown | OEU/Teaching manager | alicebrown@oeu.com |
| Team member | Jim Clerk | OEU/ Prato supervisor | jimclerk@oeu.com |
| Team member | Ben Scott | OEU/Melbourne supervisor | benscott@oeu.com |

**Sign-off:** (Signatures of all above stakeholders. Can sign by their names in table above.)

David Ellis Alice Brown

Yidie Hu Jim Clerk

Will Wang Ben Scott

**Comments:** (Handwritten or typed comments from above stakeholders, if applicable)

“This project is crucial to our university’s growth. I will be heavily involved in it, and I expect we work together to make it succeed.” – David Ellis

“If anyone has any technical issues, please do not hesitate to contact me.” –Will Wang

**Case 2**

**Task 1**

Scope Statement (Version 1)

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| --- |
| **Project Title: Hybrid Campus**  **Date:** 19/11/2021 **Prepared by:** Yidie Hu |
| **Project Purpose and Justification:**  OEU aims at providing education products to students in a variety of countries and it wants to remain competitive in the current situation where there are an increasing number of qualifications offered worldwide. The project purpose is to serve the OEU’s strategic goals of expanding the current customer base and lowering cost through the use of technology. This project enables education more accessible to more students, and it is expected to be self-funded since year 2 and generate $500,000 revenue each year from year 3 to year 5 due to more enrolled students. This project will also achieve the business objective of reduced cost because it has lower rent cost and it uses human resources at current campuses. |
| **Product Characteristics and Requirements:**   1. Distributed study centres: Study centres should be established in the areas with high demand of OEU’s qualifications and minimal competition. 2. Videoconferencing venue: The videoconferencing venue in each study centre should hold 50 students. The venue should be equipped with two large television screens, a camera, speakers and a microphone. 3. Broadband access to the Internet: The study centres should have broadband Internet access to support videoconferencing classes and laptops. 4. A computer with a document scanner: The computer with scanner is required for students to scan their tests and exams or other course materials. 5. Equipment and software for presentation and videoconferencing: Each studio needs a camera, computer, necessary software and two television screens. These enable the lecturer in the studio to see the live forage of all participating study centres. 6. Interactivity: Students in the study centres should be able to interact with the lecturer in the studio. 7. Student management/support system: The system should be developed for support and assessments. |
| **Boundaries**  Project boundaries are an important part of the scope statement as they identify what should be included in the project (in scope) as well as what should not be included (out of scope). Without specific boundaries as a part of the project scope statement, it is possible to introduce scope creep as stakeholders may assume certain items to be included in the project that aren’t clearly stated. |
| **Summary of Project Deliverables**   1. **Project management-related deliverables:**    1. Business case:   The business case analyses the benefits and risks of hybrid campus project, and it provides justification for undertaking this project.   * 1. Project charter:   The project charter formally recognises the existence of hybrid campus project and provides direction on the project’s objectives and management.   * 1. Team contract:   The team contract enables the project team to work together following the ground rules.   * 1. Scope statement:   The scope statement outlines the project’s features and deliverables, clarifying the work to be done on time and within budget.   * 1. Work breakdown structure (WBS):   The WBS break the project down into smaller components, thus enhancing efficiency.   * 1. Schedule/ Gantt chart:   The Gantt chart displays project activities with their start and finish dates in a calendar format.   * 1. Cost baseline   The cost baseline clarifies the approved budget for the hybrid campus project.   * 1. Status reports:   The status reports summarise the project’s progress and keep the stakeholders informed.   * 1. Final project presentation:   The final presentation shows the project outcomes to the stakeholders.   * 1. Final project report:   The final project report gives the project an official conclusion and evaluates the performance of the project.   * 1. Lessons learned report:   The lessons learned report reflects on the positive and negative experiences of the project, which helps future projects follow the good practice and avoid the mistakes.   1. **Product-related deliverables:**    1. Accreditation from local education authorities:    2. Site investigation report:    3. Lease contract with local communities:    4. IT and Internet infrastructure:    5. Videoconferencing system:    6. Videoconferencing equipment:    7. Student learning management system:    8. OEU website design:    9. Student assessment policy and procedures document:    10. Technical testing plan:    11. Quality check report:    12. Training: |
| **Project Success/Acceptance Criteria:**  Acceptance criteria are the criteria which must be met for the project to be considered complete and accepted by management. This section is important as it sets the expectations of what will and will not constitute acceptance (success) of the project.   1. … 2. … 3. … |

**Appendix A: Project financial analysis**

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