**Business Case for CMS-SCM System Project**

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| 1. **Project Introduction and Objective**   The purpose of this report is to study the company's plan to create a front-end management system for the new uav "Archaeopteryx SE", and whether this product can be profitable in the competition, to study the motivation of consumers to choose our products, and how to increase their interest. The name of the company is Cretaceous Technologies LTD. We are going to study three parts. The first part is whether the product can be successfully manufactured to compete with existing products. Secondly, whether it can make profits in the process of competing with existing products. Third, who are our potential customers? And how to increase their interest in our products. We'll focus on the second part. |
| **2.0 Current Situation and Problem/Opportunity**  Business has been booming recently. At present, Cretaceous Technologies' computing system cannot effectively operate many more flight module systems. Integrated front-end systems limit business interaction and growth by not using effective technologies. It must extend its business and technical operations in an "AD hoc" management style to meet business needs.  Opportunities: While these issues are difficult, they mean that many companies in the market are facing the same issues. So solving these problems as soon as possible can overcome the difficulties we are facing now. The company hired a new front end team with good collaborative understanding and programming skills to do the job. Only the details need to be improved. Based on the above analysis, as long as the project management does not go wrong, the company can solve the problem. |
| **3.0 Analysis of Option and Recommendation**  What to do:  This approach means that problems encountered during project development will be solved by their own equipment, without the need for human intervention. For example, if one task is not completed within the specified time, the second task will also be postponed without manual adjustment.  Partial solutions:  Manual intervention on factors affecting project schedule, such as time cost, scope, etc. When it is affected, manual adjustment will be carried out to bring it back to its original orbit. However, there are no strict criteria for what does not affect the overall situation.  Complete solution:  The "all" approach means managing any task throughout the project. For example, employees are required to use the same approach when performing the same tasks. This project cannot be left to your own equipment.  I recommend the second approach, "do something." Because it can ensure the completion of tasks within the specified time, control the development trend of the project from a macro perspective, and does not affect the development of project personnel personality, let them use their own familiar methods to operate, will form a good atmosphere. |
| **4.0 Budget Estimate and Financial Analysis**  I. Overall Budget:$16477.50  II. Overall Wage Costs:$1850.00  III. Infrastructure costs :$12000.00  IV. Software costs:$8000.00  V. Testing costs :$9000.00  VI. Training costs :$800.00  VII. Reserve cost:$1019.50  The discount rate is 7%.In ten years ,the total Discounted costs is $97066.The total Discounted benefits is $22300.The NPV is $12583.It will Payback in Year 5. |
| **5.0 Schedule Estimate**  This project starts on May 6, 2019 and ends on September 6, 2019, for a total of 90 working days.  The planning phase is from May 6, 2019 to May 17, 2019,  And the preliminary investigation phase is from May 20, 2019 to May 31, 2019.  The Analysis Phase runs from June 3, 2019 to June 21, 2019,  And the Design Phase starts from June 24, 2019, and ends on July 12, 2019. Implementation phase is from July 15 to August 30, 2019.  The Close-Out phase is from September 2 to September 6, 2019. |
| **6.0 Potential Risks**  1. Missing employees: Bad relationship with project manager, illness, injury, resignation. Mitigation measures: improve employee relations, health programs, ensure a safe working environment  2. Hardware failure: Technology. Some hardware is difficult to transfer: buy special insurance or warranty protection for the specific hardware you need  Lack of leadership: People. No leader in time of need. Acceptance: Fire the frequently absent leader, and a new person is appointed to lead the project after the previous project manager exits.  4. Unplanned change: Process. There is no formal change management process. Avoid: Ensure that the change management process is in place and in use.  7. Schedule delay: Process. Slow progress without a plan. Mitigation measures: Increase the frequency of project monitoring. Use WBS and CPM to plan reasonable hours and stick to the schedule. Choose the most experienced project manager.  6. Market changes: The market. Changes in market characteristics or demand. Circumvention: analyze market trends and carefully evaluate and review project determination in the first phase.  7. Infrastructure damage: Technology. Data center power failure, network breakdown. Acceptance: Implement emergency plan, start emergency or backup plan, start backup device, and contact maintenance personnel for maintenance in time.  Abuse of hardware or software: technology. Technicians are not familiar with hardware or software. Avoid: Communicate with technical personnel in advance to use familiar software and hardware that meet project requirements and are familiar with by technical personnel. |
| **7.0 Exhibits**  Exhibit A: Financial Analysis |