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**CSIT214/CSCI814/HSC814 IT Project Management**

Group Project - Project Group 1

Project Justification

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# Support key business objectives Analysis

Key business objectives of the enterprise include:

* Increase revenue streams through a membership program to grow company profits
* Maintain engagement with existing clients and encourage future purchases with friends, family and colleagues through promotion deals and rewards
* Continuously explore market segment opportunities through value-added services and user demand analysis
* Track customer purchases to understand purchasing habits and tailor marketing events and programs

Based on the analysis of the key objectives of the company, the following analysis is drawn:

* Project 1 belongs to the traditional business field. airlines and ticketing companies have matured and well-developed booking systems. It would be difficult to create additional value-added services for customers to implement this project. This project would also require existing users to change their habits to adapt to a new system potentially driving users to another system they are more familiar with, resulting in a decline of sales.
* Project 2 belongs to the field of customer relationship management. It analyses the consumption habits of frequent travellers through 7P concepts (Profiling, Persistency, Profitability, Performance, Prospecting, Product, Promotion), and improves customer satisfaction through various incentives. The project will attract new users and increase revenue. In addition, by tracking customers' consumption habits, it helps to tap potential needs and incubate value-added services to create value growth points for enterprises.
* Project 3 belongs to the traditional business area. Similar to Project 1, airlines and airport operating companies already have mature lounge service management systems. It will be difficult to implement this project and create improvements that are a value add for customers.

# ****Internal sponsor Analysis****

* Project 1 can provide sponsored advertisements for customer browsing the booking website. Its limitation is that advertisements can only be seen by customers who browse the website therefore limiting the target audience and the amount of revenue that can be generated, It will be difficult to increases profit without investment in other third part advertising. Overall, it is a good project.
* Project 2 is a great specification with huge potential for the company. The company can accurately record the purchase behavior of each customer through the membership system and accurately place sponsor advertisements. This can bring more revenue to sponsors. Therefore, the probability of getting sponsored is greater.
* Project 3 can provide customers with lounge services, increase customer experience, and increase core customer loyalty. Its limitation is that the lounge is an additional service for flights, and we cannot be sure that every consumer will use it. This leads to the fact that the content provided by the sponsor may not be known to customers. This is a high-risk and high-yield project.

# Customer support Analysis

* Project 1: Can be accessible to both registered and unregistered customers but provides limited support to non-registered customers i.e., only limited interaction with those customers and solves only less customer satisfaction overall.
* **Project 2:** Can only support registered customers although holds the customers with detailed information such as discount offers, redeem points, cashback, coupon code, etc., so it solves a large customer satisfaction overall. This incentivise customers to check this site and looking for attractive or discounted offers.
* **Project 3:** This project is like project 1 in-terms of customer accessibility however provides less information about customer under the factor of interaction and satisfaction. Also, it does not provide any benefits to unregistered customers.

# Realistic level of technology Analysis

The three projects could be implemented using modern web frameworks; however each piece of development will vary in terms of the time it takes to deliver. The only difference is the amount of work.

# Implemented time Analysis (one year or less)

* Project 1 is about flight booking. This project consists of flight management, including location, scheduling, seat map management (related to plane mode); reservation, seat selection, one-time purchase (in-flight services purchase); payment system.

The minimum viable product can be delivered within 6 months.

* Project 2 is the loyalty program. This project includes a credit system; gift redeem; credit-earning plans and user management.

The minimum viable product can be delivered within 3 months.

* Project 3 is a worldwide lounge booking system. This project involves rental management for each seat; lounge room seat map management; membership management; one-time purchase; payment system.

The minimum viable product can be delivered within 6 months.

# NPV Analysis

Project 2 yielded the best NPV result because it requires less initial investment and better year on year benefits based on the costing that was done for each project. The information for this analysis was sourced through various company approved supplier quotes and estimates from the sales and marketing team.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Project 1** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **TOTAL** |
| **Benefits** | $0 | $415,000 | $400,000 | $525,000 | $600,000 | **$1,940,000** |
| **Costs** | $450,000 | $400,000 | $300,000 | $200,000 | $150,000 | **$1,500,000** |
| **Cash flow** | -$450,000 | $15,000 | $100,000 | $325,000 | $450,000 | **$440,000** |
| **NPV** | **$220,724** |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Project 2** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **TOTAL** |
| **Benefits** | $0 | $350,000 | $500,000 | $650,000 | $800,000 | **$2,300,000** |
| **Costs** | $375,000 | $300,000 | $225,000 | $150,000 | $100,000 | **$1,150,000** |
| **Cash flow** | -$375,000 | $50,000 | $275,000 | $500,000 | $700,000 | **$1,150,000** |
| **NPV** | **$757,872** |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Project 3** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **TOTAL** |
| **Benefits** | $0 | $425,000 | $450,000 | $475,000 | $500,000 | **$1,850,000** |
| **Costs** | $415,000 | $400,000 | $375,000 | $300,000 | $150,000 | **$1,640,000** |
| **Cash flow** | -$415,000 | $25,000 | $75,000 | $175,000 | $350,000 | **$210,000** |
| **NPV** | **$63,546** |  |  |  |  |  |

***Note: 8% Discount Rate***

# Risks Analysis (meeting scope, time, and cost goals)

**Project 1** has a high risk, and the low risk score is 60. The specific analysis is as follows:

* Scope: The scope of the project involves internal and external scopes. The internal scope includes at least the sales department, financial department and operation department, and the external scope includes at least each airline, each payment channel and ticket agency. There are many parties involved in the project and the needs are complex, and the problem of ambiguous project scope may arise.
* Time: The project involves almost all customers, internal core business departments and external companies. Due to the large number of related parties and complex business logic, the project will take no less than 6 months to implement.
* 1.3 Cost: The internal system structure of the project is complex, system boundaries and external interactions are many, and there may be problems of scope expansion and project delay, and the overall project cost is high.

**Project 2** has certain risks. The low risk score is 80. The specific analysis is as follows:

* Scope: The scope of the project is mainly concentrated within the enterprise, including sales department, financial department, and operation department. The relevant parties of the project are based on the internal enterprise, and the scope of the project is relatively clear.
* Time: The project involves the core business departments of the enterprise, but mainly focuses on customer management and service. The time required for project implementation is no less than 3 months.
* Cost: As the core of customer relationship management, the project boundary is relatively clear, related parties are concentrated within the enterprise, and the overall project cost is moderate.

**Project 3** has a higher risk, and the low risk score is 60. The specific analysis is as follows:

* Scope: The scope of the project involves internal and external scopes. The internal scope includes at least the sales department, financial department and operation department, and the external scope includes at least airlines and airport operating companies. There are many parties involved in the project and the needs are complex, and the problem of ambiguous project scope may arise.
* Time: The project involves almost all customers, internal core business departments and external companies. Due to the large number of related parties, the project will take no less than 6 months to implement.
* Cost: The internal system structure of the project is complex, system boundaries and external interactions are many, and there may be problems with scope expansion and project delay, and the overall cost of the project is relatively high.