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Semester Project for Engineering Entrepreneurship

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Engineering Entrepreneurship

Semester Project

This is an *open-ended* project. **Due to the open nature of this project, when in doubt - ASK!**

THE SCENARIO

The semester project will focus on developing a preliminary business plan for a company. This will entail coming up with an idea, exploring the marketability of the idea, and developing preliminary plans for the business.

GENERIC OUTLINE

Your final business plan we will be modeled after the following outline (which we will discuss in detail in the **Section B: Business Plan** set of class notes)

Title Page
Executive Summary

Section A: Company Profile

Section B: Market Research and Analysis
(1) Customer Description
(2) Market Analysis

Section C: Competitive Analysis

Section D: Marketing Plan
(1) Marketing Objectives
(2) Products and Services
(3) Pricing
(4) Promotion
(5) Place (Location and Distribution)
(6) Ongoing Marketing Evaluation

Section E. Operations
(1) Business Operations
(2) Facility
(3) Office equipment
(4) Business Forms
(5) Accounting and Bookkeeping System
(6) Suppliers

Section F. Human Resources Management
(1) Local Labor Market Conditions
(2) Personnel Management
(3) Outside Assistance

Section G. Financial Plan
(1) Sources and Uses of Funds
(2) Depreciation Schedule
(3) Sales and Cost of Goods or Services Sold Schedules
(4) Loan Amortization Schedule
(5) Income Statement
(6) Cash Flow Statement
(7) Balance Sheet
(8) Breakeven Analysis

PROJECT DUE DATES

Task 1 turned in at/or before class on Wednesday, February 13
Task 2 turned in at/or before class on Wednesday, February 27
Task 3 turned in at/or before class on Wednesday, March 13
Task 4 turned in at/or before class on Wednesday, April 3
Task 5 turned in at/or before class on Wednesday, April 17
Task 6 turned in at/or before class on Wednesday, May 1

DEVELOPMENT OF MATERIALS

In comparison to all your other classes, I am not concerned about plagiarism in this course. As such, I encourage you to use any material that you find – whether that be from a company's web site, franchise agreement, or Security and Exchange Commission (SEC) filings.

My suggestion is that you find "role-model" public company and look at their SEC filings. You can search for a company's filings at the following web site:

http://www.sec.gov/cgi-bin/srch-edgar

In terms of filings, here are some of the different types of forms (the three in bold are the key ones to review):

S-1 and S-1/A -- initial stock registration statement

10-Q – quarterly report of earnings
10-K – annual report of earnings

DEF 14A -- proxy issue for shareholders to vote on
8-K – notice of material event to company
SC 13G and SC 13G/A – notice of large shareholder buying/selling the company's stock

GRADING OF MATERIAL

Your project grade will based on the following criteria:

- Professionalism
- Completeness
- Accurateness
- Uniqueness
- Informativeness
- Format
- Conciseness
- Clarity

TASK 1

Your deliverable for this task is:

(1) Write **Section A** (Company Profile) of your business plan

Key issues to include:

- History of your company:
  - Is it a start-up business? If so, when do you plan to open it?
- Type of business: retail, wholesale, service, manufacturing, contracting, professional, importing/exporting, etc.
- Mission of the company: a mission statement defines the reasons for the existence of the business.
- Long-term goals: What do you plan for your business between 5 and 10 years from now?

Other key questions to prompt your discussion:

1. What is/will the Company be called?
2. Is this a merchandising, manufacturing, or service business?
3. When will/did the Company start operating?
4. What products or services will/does the Company provide?
5. Is this a seasonal business?
6. What will be the business form of the Company? (sole proprietorship, partnership, corporation)
7. Who will/does own and manage the Company?
8. What facilities will be needed to operate the Company? (Ex. office, retail, factory)
9. What territory will the Company operate in or serve?
10. Why have you chosen your particular location?
11. What will/are the Company's normal business hours?
12. Will/Is the business a part-time or full-time business?
13. What is the current status of the Company? (start-up, expansion, acquisition)
14. What licenses or tax permits are required to operate the Company in the county, city, state, country?

Business Operations

1. Why will the business be successful?
2. What is your experience in this business or industry?
3. Have you spoken with other people in this kind of business? What was their response?
4. What will be special about your business?
5. Have you spoken with prospective trade suppliers to find out what managerial and/or technical help they will provide?
6. Have you asked about trade credit?
7. If you will be doing any contract work, what are the terms? Reference any firm contract and include a copy as supporting documentation.
8. Do you have letters of intent from prospective purchasers of the product/service?

The Product/Service

If you are manufacturing a product:

1. What is the product?
2. What will you need (raw materials) to manufacture the product?
3. What suppliers (by name) will you need to provide raw materials?
4. Who will buy your product? Do you have a contract?
5. What manufacturing capacity will you need?
6. Where will you manufacture the product?
7. Will the product need to be protected by patent of copyright?

If you are reselling a product manufactured by someone else:

1. What is the product?
2. Who will supply the product?
3. How will the product be shipped to you?
4. Do you need to package the product for resale to your customer?
5. If you deliver, how will you ship the product?
6. How will you display the product if the customer buys at your store?
7. Will you drop ship the product directly from the manufacturer to the customer?

If you are providing a service:

1. What is the service?
2. What will you need to do in order to provide this service? (Buy equipment, hire people)
3. Does this service require special insurance, licensing, or bonding?

TASK 2

Your deliverable for this task is:

(1) Write **Section B** (Market Research and Analysis) of your business plan
(2) Write **Section C** (Competitive Analysis) of your business plan

For a detailed description and example, see the class notes – **Section B: Business Plan** and **Section A: Developing an Idea**

TASK 3

Your deliverable for this task is:

(1) Write **Section D** (Marketing Plan) of your business plan
(2) Write **Section E** (Operations) of your business plan

For a detailed description and example, see the class notes – **Section B: Business Plan**

TASK 4

Your deliverable for this task is:

(1) Write **Section F** (Human Resource Management) of your business plan

For a detailed description and example, see the class notes – **Section B: Business Plan**

TASK 5

Your deliverable for this task is:

(1) Write **Section G** (Financial Plans) of your business plan. Though we are going to simplify our analysis to the following subsections:

a) Sources and Uses of Funds
b) Estimated start-up expenses
c) Estimated monthly expense
d) Estimated monthly income
e) Breakeven Analysis

For a detailed description and example, see the class notes – **Section B: Business Plan**

TASK 6

Your deliverable for this task is:

(1) Create a cover page for your plan
(2) Write the executive summary for your plan
(3) Make any corrections to previous sections in the plan

For a detailed description and example, see the class notes – **Section B: Business Plan**