Tim 80C Lecture 10 May the 4th (be with you)

Agenda

1) Course Roadmap

2) Financial Strategy

3) Project Phase II meetings next week

4) Midterm Hint

5) More Financial Analysis
1. Course Roadmap

Course has 4 main parts

- Product strategy
- Market strategy
- Business (competitive) strategy
- Financial strategy

5 weeks left in class.

Financial Strategy 2-3 wks
Integration 1 week
Last week - Project Presentation
Guest speakers & Games - 1 wk

* END PRODUCT FOR CLASS -

Complete business plan for your startup

- Create a "real" version of your startup
- "Sell" the idea/business plan
(2) Financial Strategy

There are two main parts to financial strategy:

(1) Cash flow analysis - typically 3-5 years out

(2) Funding Strategy - to obtain the cash for all the costs ("negative cash flows") - facilities, hiring people, product development, manufacturing, marketing, etc.

Separation Principle

(1) First do the cash flow analysis.

(2) Then do the Funding Strategy based on the cash flow analysis.

Rationale: don't let the presence or absence of funding influence the cash flow analysis.
Financial Analysis, cont.

[Project Phase 3]

Cash Flow Analysis

Teams need to estimate your expenses and revenues for 3-5 years.

Organize your expenses by activity:

1. Product development
   - People: Type (e.g., designers, engineers); how many (e.g., 5-10) and salaries (e.g., $50k-100k)
   - Equipment: software, desktops, laptops, servers, 3D printers, etc.
   - Facilities: ~100-200 ft² per person @ $25/ft² per month

2. Product manufacturing
   - # units
   - Manufacturing cost per unit
   - Transportation cost of shipping units
(3) Marketing & Sales
- People (sales people): how many; salary varies
- Advertising campaigns: "views" or how many "impressions"; cost per impression ($2-5/100)

(4) Management and Support
- People (e.g., CEO, CFO, CTO)
- How many & salaries
- Legal
- Human Resources (HR)
- Hiring, firing, workplace issues

Estimate Revenue based on Business Goals, Market Strategy, Product Strategy

(1) Estimate the total (cumulative) target market size for next 3-5 years

source: Market strategy & revenue map

n = number of years in the projection (3-5)

\[ \text{total market size} = \sum_{n=0}^{N-1} \text{target market size} \times (1+\text{growth rate})^n \]
(2) Forecast revenue for 3-5 years
(Source: Business Goals - Market Share)

(3) Determine Price per unit
(Source: product strategy, Market strategy (4 P's))

(4) Determine Sales Volume = \[ \frac{\text{Revenue}}{\text{Price per unit}} \]

For sales volume, use product lifecycle analysis:

sales / time

introduction - growth - maturity - decline

TIME
Suggestions:

(1) Review the handout on cash flow analysis

(2) Use Excel to generate your cash flow model

(3) Work both “top-down” and “bottom-up”

market

\[ \begin{align*}
\text{business goals} & \quad \text{Revenue} \\
\text{Price per unit} & \quad \text{Sales Volume}
\end{align*} \]

do 2-3 iterations