(1) Financial Strategy - Funding Plan

(2) Financial Strategy - Ownership, Dilution, Shares, and Valuation

(3) End-games for start-ups

(4) Project - Phase IV assignment

(5) Roadmap for end of quarter

[Recall the previous financial analysis step was to generate the cash flow analysis, income statement, & balance sheet [Lect. 14]] (also ratios)
(1) Financial Strategy - Funding Plan

The Funding Plan is a time phased plan for when & how the start-up will raise the necessary capital.

Process:
(1) Set the funding objectives for 3-5 years (How much capital is needed based on the cash flow analysis.)

"Ballpark" examples:

Seed Capital ($1M+): develop a prototype
  e.g. $100,000 in yr 1

Round A ($10M+): product development
  e.g. $2m. in yr 2

Round B ($100M+): product launch, manufacturing, marketing, customer service, etc.
  e.g. $10M in yr 4
(2) Decide the amount of equity that will be exchanged for funding

Dilution ≡ % reduction in ownership

Ex: to get seed money, you give up 30% of the company
⇒ 30% dilution
(30% is worth $100,000)

(3) Determine the funding source(s)

(a) Private sources of funding
- founder's personal savings
- friends & family (NOT recommended)
- angel investors (wealthy individuals looking for high risk - high reward opportunities)

(b) Financial Institutions (professional investors)
- Venture Capitalists (Kleiner-Perkins, Anderson Horowitz)
- Investment Banks (Goldman Sachs, Merrill Lynch)
(c) Government Funding
   - Defense (DOD, NSA, DARPA)
   - Public Research - (NSF, NIH, USEPA, etc.)

(d) Crowd sourcing (generally not for equity)

(e) Large companies (Microsoft, Cisco, IBM, Intel)

(f) Bank Loans (debt, not equity)

(4) Obtain the funding
   - Compelling Product Idea (Conceptual design)
   - Business Plan (Product strat., Market strat., Business/competitive strat., Financial strat.)
   - Prototype/mockup (esp. for VCs)
   - Presentation (10-15 min. pitch)
(2) Financial Strategy - ownership, dilution, shares, and valuation

Funding Process: Execute the Funding Plan

Step 1 - The owners give up D% of the company.

\[ D\% = \text{dilution in ownership} \]

Step 2 - In return for D% of the company (equity), the investors (VCs) provide the company with an investment of \$I

\[ \$I = \text{invested capital} \]

Valuation of the company

D% of the company = \$I

The whole company is therefore

\[ \frac{100\%}{D\%} \times \$I \]
Definition: Post Money Value

... is the value ($) of the company after it receives funding.

\[
\text{Post Money Value} = \frac{100\%}{D\%} \times I
\]

Example

Founders are willing to give up 20% of the company for $1M of seed money to develop a prototype of the product.

\[
D \text{ (dilution)} = 20\% \\
I \text{ (investment)} = \$1M
\]

\[
\text{Post Money Value} = \frac{100\%}{20\%} \times \$1M \\
= \$5M
\]

After funding, the startup will be worth $5M.
Definition: Pre money Value

... the value ($) of the founder's share of the company

Pre Money Value = Post Money Value - Investment

\[ = \left[ \frac{100\%}{D\%} \times $I \right] - $I \]

Ex: \ D = 20\% \quad I = $1M \quad \text{Post Money Value} = $5M

Pre Money Value = \left[ \frac{100\%}{20\%} \times $1M \right] - $1M

= $4M
Step 3) Decide on the number of shares to issue in order to keep track of ownership.

\[ S_+ = \text{the total number of shares} \]

The value ($) of \( S_+ \) is equal to the post-money value of the company.

\[
\left[ \frac{100\%}{D\%} \right] \times \$I = S_+ \times \text{price per share} \tag{5}
\]

Example

\[ D = 20\% \quad \text{Post Money Value} = \$5M \]
\[ I = \$1M \]

Company decides to issue \( S_+ \) shares.

\[ S_+ = 1M \]

Price per share = \[
\left[ \frac{100\%}{D\%} \times \$I \right] \div S_+ \]

\[
\frac{100\%}{20\%} \times \frac{\$1M}{1,000,000} = \$5/\text{share}
\]
Rule of Thumb

In the initial round of funding (seed round)

price per share $1 (50 cents - $2)

Series A & Series B price per share depends on the company.
(3) End game for successful start-ups

(1) Become a publicly-traded company through an Initial Public Offering (IPO)

advantage: the company now has access to trillions of dollars available on securities markets

disadvantage: the company is now controlled by a Board of Directors elected by and representing shareholders (people who own stock)

(2) Remain a private company

advantage - founders retain more control

disadvantage - less funding available

(3) Get acquired by a large company (Google, Apple, Linkedln, IBM, GE...)
(4) Project Phase 4

Pitch: - 10 - 15 minute presentation presenting your start-up to the investor (VC)

- About the company (1-2 slides)
- The product or service (2-3 slides)
- The Market Strategy (1-2 slides)
- The Business (competitive) Strategy (1-2 slides)
- The Financial Strategy (2-3 slides)

For Notebooks:

Complete Financial Strategy

- Funding Plan - objectives, sources of funding, dilution, ownership, valuation, shares of stock
- Accounting: Income Statement, Balance Sheet
- Financial (health) metrics: ROI, Profit Margin, etc.

Complete any backlogged work from Phases 1, 2, 3; integrate feedback.
(5) Roadmap for the rest of the Quarter

Tuesday - Guest lecture:
Paul Vroomen
from entrepreneur to VC to PhD student
> equity, base
> crowd funding

Thursday - Final lecture

Tuesday - Presentations*

Thursday - Presentations*

Final Exam