Problem 1: **Coffee Shop Startup**

Objective:

Our friend is thinking about opening a coffee shop in England and she needs our help to determine whether opening a coffee shop is a good idea.

Clarification Question:

1. Is there a particular profit or revenue is she trying to reach within a specific time frame?
2. What type of coffee shop is she trying to open, is it a premium coffee shop or convince low price? Knowing that will help us what market our friend is playing in and who the competitors are.

Framework:

Coffee market attractiveness	Competitive landscape	Our friend's capabilities	Profitability
• What is the opportunity size? • What is market growth? • What is the average profit margin?	• How many competitors are there? • How much do they have?	• Does our friend have experience? • Does our friend have relationships with suppliers?	• What are the expected revenues and costs?

Calculation: We'd like to figure out how big the market is to best estimate how much coffee she can sell. Focus on Cambridge residents only.

Using Top-down approach:

- Start with the population of Cambridge. **100K people**
- Estimate the percentage that drink coffee. **50% = $50K**
- Calculate the number of cups consumed per year. **9M cups yearly.**
- Estimate the average price per cup. **9M * $2 per cup = $18M.**

Recommendations:

- For the next steps, I'd like to focus on estimating the annual profit to see if it is in line with our friend's goal.
- For now, I recommend that our friend consider the idea.

Problem 2: **Entering the U.S. Beer market**

Objective: Our client is a large manufacturer and retailer of non-alcoholic beverages. They're looking to grow, and our objective is to determine whether or not should they enter the U.S. beer market.

Clarification Questions:

1. Is our client looking to specifically grow revenues or profit?
2. Is there a particular financial goal our client is trying to reach within a certain time frame?

Framework:

Beer market attractiveness	Competitive landscape	Our client's capabilities	Profitability
• What is the market size? • What is the market growth rate? • What are the average profit margins?	• How many competitors are there? • How much share do they have?	• Are there significant synergies we can leverage?	• What are the expected revenues and costs? • How long will it take to break even?

Calculation: Marketing sizing approach

- Start with the U.S. population. **320M people**
- Estimate the percentage that are legally allowed to drink alcohol.
  320M * %75 = 240M people
- Estimate the percentage that drink beer.
  240M * 75% = 180M people.
- Estimate the frequency of in which people drink beer.
  5 beers per week * 50 = 250 beers per person per year
- Estimate the average price of per can of beer
  45B can * $2 per can = $90B

Move On: Assume that 12-oz. can of beer sells for $2 on avg. To produce a keg of beer it costs $100 for raw materials, $95 for labor, and $75 for

storage. If a keg of a beer holds 1800-oz. of beer, what is the profit margin for beer?

- Total cost of a keg = $100 + $95 + $75 = $270
- Cans in a keg = 1800-oz. / 12-oz. = 150
- Cost per can of beer = $270 / 150 = $1.80 per can
- **Profit margin = ($2 = $1.80) / $2 = 10%**

Recommendations:

I recommend that our client should not enter the U.S. beer market for the following reasons:

- One, although the market size is fairly large at $90B, the margins for beer are just 10%, significantly less than our client's overall operating margin of %30.
- Two, the beer market is very competitive, market share is concentrated among a few players which implies high barriers to entry.

Problem 3: **Fashion Co. Profitability**

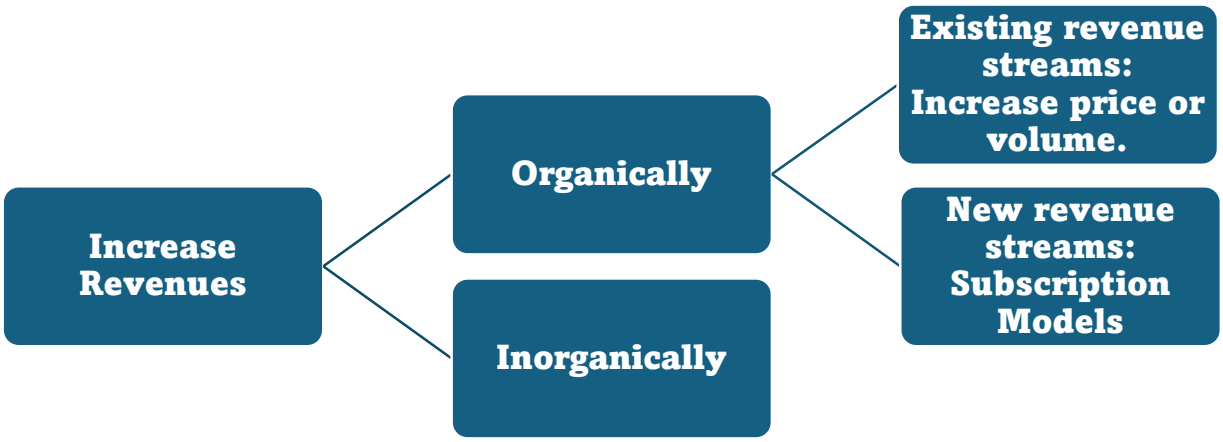
Objective: Our client is FashionCo, a player in the women's fashion market. It's been in the industry for a long time, but has experienced some declined revenues each year for the past five years. Moreover, FashionCo. wants to understand the cause for the decline and what they can do to drive revenue?

Clarification Question:

1. Can you provide specific information on any changes or trends in your product lines, pricing strategies, or marketing efforts over the past five years that might correlate with the revenue decline?

Framework:

Revenue drivers	Customers	Competitors
• Has the quantity sold decreased? • Is FashionCo selling its products at lower prices?	• Have customer needs changed? • Have purchasing habits changed?	• Have new players entered? • Have existing competitors made strategic moves? • Are competitors seeing a decline?



Approach for revenue increase:

Intermittent sales

- Revenue: sale increase of 100% over 3 months.
- Cost: 20% purchase discount for all customers over 3 months.
- Assumption: discount would increase pre-sale purchases sales by 100% over 3 months.

Calculation:

- Customer annual spend = $75
- Customer spends over three months = $75 / 25 = $25
- Increase in sales = $25 * 100% = $25 sales increase
- Cost = ($25 + $25) * 20% purchase discount = $10 cost
- Net revenue increase = $25 - $10 = $15 increase per customer
- Overall = 10M customers * $15 increase = $150M revenue increase

Recommendations:

- I recommend that FashionCo launch an intermittent sales strategy for the following reason: an intermittent sales strategy would increase revenues by $150 per year, which is a 15% increase in annual revenues.
- For the next step, there's one specific area I'd like to look into. Understand if FashionCo's products are satisfying customer needs and preferences.

Problem 4: **Pharma Acquisition**

Objective: Our client, GlobalPharm is a major pharmaceutical company that research, develop, and sells small molecule drugs. They are interested in entering rapidly growing segment of drugs called biological, which have the capability to treat conditions not addressable by tradition drugs.

The objective of the case is to determine whether GlobalPharm should acquire BioFuture, a leading biological start-up.

Brainstorm Ideas:

- There are meaningful synergies between the two companies.
- BioFuture is fast-growing and profitable.
- The drugs that BioFuture is developing are in attractive markets.
- The acquisition price of BioFuture is attractive.

Framework:

Market attractiveness	Financials	Synergies
○ What is the market size of BioFuture's drug? ○ What are these markets' growth rates? ○ What are the average profit margins?	○ Is the acquisition price attractive? ○ What is the expected return on investment?	○ Are there potential revenue synergies? ○ Are there potential cost synergies?

Note: GlobalPharm has decided that they wanted to take an acquisition route to enter the biologicals market and have determined that they can't develop the capabilities from scratch and have already looked into potential partnerships.

Characteristics that must be true for BioFutures drug pipeline to be attractive:

- The drugs can be capture meaningful market share.
- The drugs perform well on patients & drugs will be approved.
- The drugs are proprietary and can't easily copied.

Calculation approach:

GlobalPharm believes that the likelihood of success of BioFuture's primary drug candidates can be improved by investing an $150 additional million in a large Phase II trial. The hope is that this investment would raise the success rate in Phase II, meaning that more candidates drugs successfully make it to Phase III and beyond. By how much would Phase II success rate need to increase in order for this investment to break even? Assume that the drug would be worth $1.2B.

- ❖ Start with $1.2B, the value of the drug if it is approved.
- ❖ Calculate the expected value of the drug in Filing phase.
- ❖ Calculate the expected value of the drug in Phase III.
- ❖ Add $150M to this value to determine the new expected value.
- ❖ Determine what percentage increase in expected value is.
- ❖ Determine how much Phase II success needs to increase by.

Calculation:

- ➢ (90% success rate) ($1.2B) + (10%) ($0) = $1.08B expected value in Filling phase.
- ➢ (50% success rate) ($1.08B) + (50%) ($0) = $540M expected value in Phase III.
- ➢ $150M + $540M = $690M new expected value in Phase III.
- ➢ $150M / $540M = ~28% increase in expected value.

Qualitative question framework:

Company	Size	Location	Area of focus
GlobalPharm	$10B annual revenue	Germany	Small molecule drugs
BioFuture	$1B market value	San Francisco	Biological

Recommendations:

- ✓ There are likely major differences in company culture. Old vs Startup.
- ✓ There are geography and language risks.
- ✓ The two companies have minimal overlap in area of focus.

Problem 5: **Increasing Drug Adoption**

Framework:

Patients	Physicians	Insures	Medicine Company Capabilities
• How can we raise awareness among patients? • How can we create patients advocates?	• How can we raise awareness among patients? • How can we create physician advocates?	• How can we ensure drug is covered by insures? • How can we create insurance advocates?	• How can we ensure we produce enough supply of drug?

Why would insurers want to cover Hypertos?

Insurers would cover Hypertos if it saves them money by decreasing the incidence of hypertension among patients, thus decreasing treatment cost.

Assumption:

If covering Hypertos costs $5K per year high risk individuals.

1) How much would it cost the insurers to not cover Hypertos and treat hypertension?

2) How much would it cost to cover Hypertos and treat hypertension?

Assume the following:

- There are 300M people in the U.S.
- 1:3 have hypertension
- 2:3 people are at risk of hypertension; 1:4 high risk
- Treating someone with hypertension costs $10K per year
- Hypertos is 80% effective at preventing hypertension. The other 20% of the time, the patient will develop hypertension and costs $10K per year to treat.

Solution:

Not cover Hypertos costs insures $1000B or $1T.

Calculate the cost to insurers if they cover Hypertos:

- 300M people in US * (2/3) at risk (1/4) * are high risk = 50M people.
- 50M people * 5K cost to insure = $250B to cover Hypertos.
- 20% of 50M still develop hypertension = $1000B to treat failed Hypertos patients.
- There are still 50M (100M with hypertension – 50M high risk) with hypertension = 50M * $10K to treat = $500B to treat remaining hypertension patients.

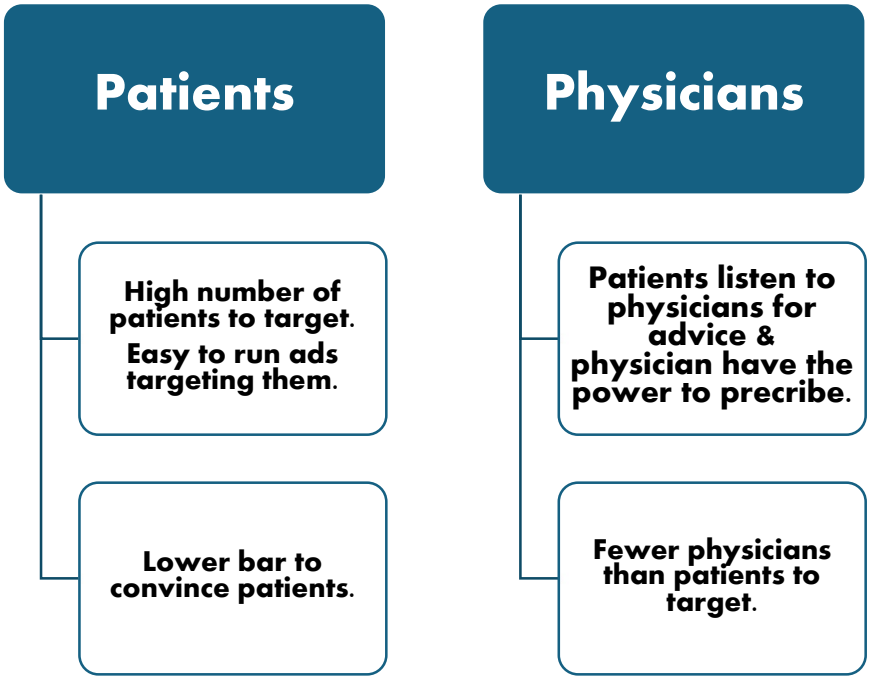
Covering Hypertos costs insurers $850B, a saving of $150B.

How much could Medicine Company increase Hypertos' price such that insurers would still choose to cover the drug?

- Hypertos has an 80% success rate saving insurers $10K a year in treatment costs.
- This is an expected value of saving insurers $8K per patient.

Therefore, insurers would cover Hypertos if it is priced less than $8K.

Do you think it's better to focus on targeting patients or targeting physicians to increase adoption of the drug?



Targeting physicians is more effective, but requires more effort.