

ECONOMIST CONSULTING CLUB USJ



Case Book

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ECC

USJ 1875
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Note to the ECC members:

Dear Members,

This book is crafted with the intent of aiding aspiring consulting professionals, like yourselves, in preparing for successful interviews and ultimately thriving in your consulting careers. Its contents are designed to be accessible to all readers, offering clear explanations and breakdowns of real consulting scenarios sourced from diverse consulting organizations and experts.

The primary aim of this book is to equip ECC members with the essential skills and knowledge needed to excel in case-solving, empowering you to compete effectively for coveted positions at leading consulting firms. We believe that the insights and guidance offered within these pages will prove valuable in your professional journey.

Wishing you the best of luck as you prepare diligently for your upcoming interviews. Study well, and may your efforts lead to success!

Warm regards,



List of Cases:

I-Razor blades

II-Gaz Stations

III-MEA Direct Flights

IV-Themed Park

V-Burger Restaurant

VI-Gallons of paint

VII-Opera house

VIII-Tobacco company

IX-Mazda cars

X-Broadcasting Company

Several types of cases are commonly used:

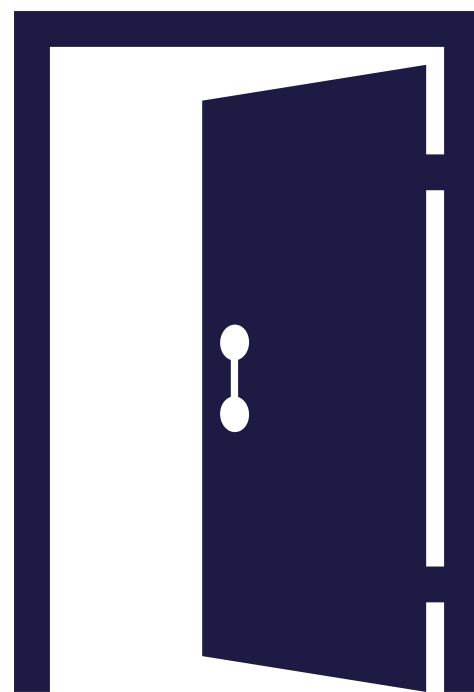
“Market Sizing”



“Profitability”



“Market Entry”





MARKET SIZING:

In market sizing analysis, there are two primary types of cases: Demand-side and Supply-side.

Demand-Side Market Sizing: In Demand-side cases, the limiting factor is typically the demand for a product or service. Key considerations include:

- **Population:** Identify the total population relevant to the product or service.
- **Gender (if relevant):** Consider gender differences in consumption if significant.
- **Age Groups:** Segment the population by age groups if age affects consumption patterns.
- **Income Classes (if relevant):** Segment by income classes if affordability varies.
- **Frequency:** Determine how often individuals or groups use the product or service.

Supply-Side Market Sizing: In Supply-side cases, the constraint is on the capacity of firms to provide the product or service. Key considerations include:

- **Capacity:** Understand the maximum capacity of firms to supply the product or service.
- **Opening Hours:** Note the operating hours during which the product or service is available.
- **Peak and Non-Peak Hours:** Identify busy and quiet times during operating hours.
- **Occupancy:** Assess the average occupancy or utilization rate of firms during different times.

By distinguishing between demand and supply constraints and considering these factors, market sizing analyses can provide informed estimates tailored to the specific context and limitations of the market. This structured approach is valuable for consultants when conducting market assessments and offering well-informed recommendations.

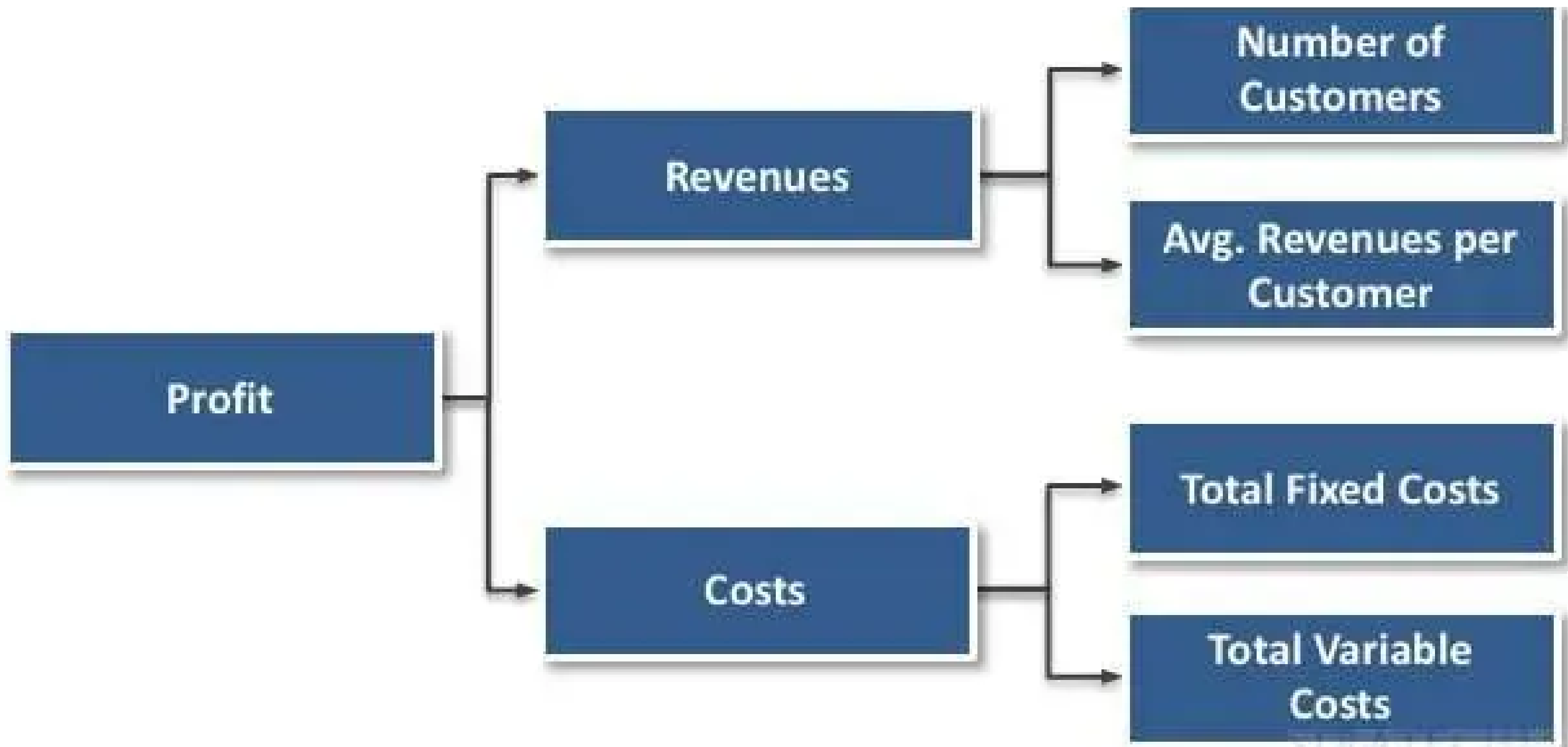


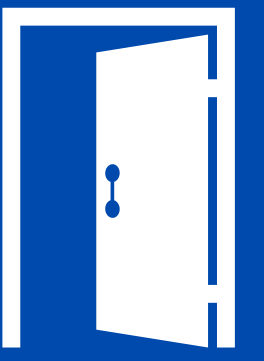
PROFITABILITY:

To assess the profitability of a business or investment opportunity, follow these key steps:

- **Market Analysis:**
 - Evaluate economic stability.
 - Gauge trend popularity and buzz.
 - Identify investment barriers.
 - Analyze the competitive landscape.
 - Estimate market size.
- **Revenue Analysis:**
 - Calculate potential revenues based on market size and expected market share.
- **Expense Analysis:**
 - Categorize expenses into fixed and variable costs.
 - Determine expense ranges if available.
- **Profit Calculation:**
 - Calculate profits by subtracting total expenses from revenues.
- **Breakeven Analysis:**
 - Calculate the breakeven point, where total revenues equal total expenses.
- **Profitability Assessment:**
 - Evaluate if projected profits exceed initial investment costs.

This framework helps in making informed decisions about the financial viability of a project or business opportunity.





MARKET ENTRY:

When considering market entry strategies, you have three primary options:

- **Green Development (Starting from Scratch):**
Description: Create a new business from scratch in the target market.
Advantages: Full control, customization, no acquisition costs.
Considerations: Requires time and resources, higher risk, brand-building effort.
- **Franchising (Buying Franchise Rights):**
Description: Purchase the rights to operate a franchise branch.
Advantages: Established brand, reduced risk, franchisor support.
Considerations: Initial fees, limited flexibility, brand dependency.
- **Acquiring an Existing Player (Buying the Business):**
Description: Buy an existing business in the target market.
Advantages: Immediate presence, existing infrastructure, potential synergies.
Considerations: Acquisition costs, integration challenges, due diligence.

Choose the strategy based on factors like resources, risk tolerance, and long-term goals. Conduct thorough research and due diligence to make an informed decision.



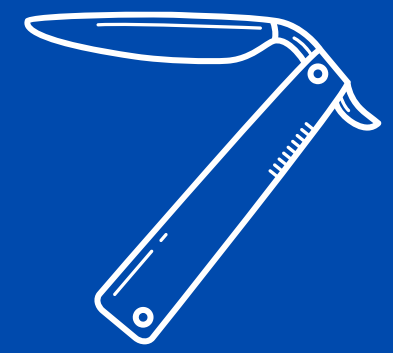
DISCUSSION CASE:

- **Listening and Understanding:** Start by actively listening to the problem description to grasp the context, challenges, and objectives clearly.
- **Clarity through Questions:** Seek clarification when any part of the scenario is unclear. Ask relevant questions to gather essential information.
- **Structured Response:** Even without calculations, structure your response logically for clarity and coherence.
- **Problem Identification:** Clearly state the core issue or challenge presented in the case.
- **Proposing Solutions:** Offer practical solutions, explaining the reasoning behind each suggestion. Prioritize these solutions based on feasibility and impact.
- **Exploring Alternatives:** Discuss alternative approaches or solutions and weigh their pros and cons.
- **Risk Evaluation:** Assess potential risks or drawbacks linked to the proposed solutions and suggest strategies for mitigation.
- **Effective Communication:** Articulate your thoughts clearly and concisely, using effective verbal and non-verbal communication skills.
- **Engaging Dialogue:** Be open to feedback and engage in a constructive discussion with the interviewer, responding thoughtfully to follow-up questions.
- **Summarize and Conclude:** Recap your main points and reiterate your proposed solutions to leave a lasting impression.



These are valuable tips and considerations when dealing with business cases, financial analysis, and market assessments. Here's a summarized list of these tips for quick reference:

- **Realistic Estimates:** Always provide estimates that are close to reality.
- **Life Expectancy:** Assume a life expectancy of 80 years when applicable.
- **Equal Age Groups:** Divide the population into age groups equally, with each group representing 25% of the population.
- **Income Classes:** Consider income classes, such as high, medium, and low income.
- **Gender Split:** Assume an equal split between genders (50% male, 50% female).
- **Revenue Calculation:** Calculate revenues by multiplying prices by quantity.
- **Fixed Costs:** Include fixed costs like rent, labor wages, utilities, maintenance, marketing, and insurance.
- **Variable Costs:** Consider variable costs like COGS, inventory, and transportation.
- **Volume vs. Value:** Clarify whether you need to find market size by volume or value.
- **Ease of Calculation:** Keep numbers and estimations easy to calculate and work with.
- **Breakeven Goal:** Always inquire about the breakeven point and goal.
- **Household Consideration:** For cases related to cars or houses, calculate the number of households.
- **Payback Period:** Understand that payback period is the time to breakeven.
- **Taxes on Net Profits:** Calculate taxes only on net profits.
- **Investment Capacity:** Check if the case allows for investment considerations.
- **Business Types:** Recognize three types of businesses: manufacturing, commercial, and agriculture.
- **Age Limits:** Take age limits into account when relevant.
- **TV Channel Revenue:** TV channel revenue is generated through ads & publicities.



Razor blades-Market Sizing

Prompt: Estimate the number of razor blades in Dubai.

Case information:

Population in Dubai is estimated to be 3 Million people.

Gender rate is estimated to be divided equally, 50% Men 50% Women.

Divide the study between the two genders.

Life Expectancy is 80 Years old.

Population equally distributed between ages.

Population: 3 Million

A)Men: 1.5 Million

Life expectancy: 80 Years

0-20Yrs: 25%-375,000

20-40Yrs: 25%-375,000

40-60Yrs: 25%-375,000

60-80Yrs: 25%-375,000

Gender: 50% Men-50% Women

Percentage of Men that shave:

0-20Yrs: 20% of 375000=75,000

20-40Yrs: 80% of 375000=300,000

40-60Yrs: 80% of 375000=300,000

60-80Yrs: 60% of 375000=225,000

Total of Men that shave=900,000

Percentage of Men that use Razor blades: 60% of 900,000=540,000

Frequency: 30% of 540 000 use a Razor blade Everyday(7t/w)

50% of 540,000 use a Razor blade Every 2 days(3.5t/w)

20% of 540,000 use a Razor blade Once a week(1t/w)

Weighted Average= $(30\% \times 7) + (50\% \times 3.5) + (20\% \times 1) = 4.05$ Razor blade/Week

Number of Razor blades used per week: $4.05 \times 540,000 = 2,187,000$

Number of Razor blades used per year: $2,187,000 \times 52 = 11,3724,000$

B) Women: 1.5m

Life expectancy: 80 years

0-20Yrs: 25%-375,000

20-40Yrs: 25%-375,000

40-60Yrs: 25%-375,000

60-80Yrs: 25%-375,000

Percentage of Women that shave:

0-20Yrs: 10% of 375000=37,500

20-40Yrs: 60% of 375000=225,000

40-60Yrs: 40% of 375000=150,000

60-80Yrs: 20% of 375000=75,000

Total of Women that shave=487,500

Percentage of Women that use Razor blades: 50% of 487,500=243,750

Frequency: 50% of 243,750 use a Razor blade each week(4t/m)

30% of 243,750 use a Razor blade each 2 weeks(2t/m)

20% of 243,750 use a Razor blade each month(1t/m)

Weighted Average= $(50\% \times 4) + (30\% \times 2) + (20\% \times 1) = 2.8$ Razor blades/month

Number of Razor blades used per month: $2.8 \times 243,750 = 682,500$

Number of Razor blades used per year: $682,500 \times 12 = 8,190,000$

In this estimation scenario for razor blade quantity in Dubai, a structured approach is outlined, considering demographic factors and gender-specific shaving habits. The process involves:

1. **Population Analysis:** Starting with Dubai's population, it acknowledges the different shaving habits of men and women.
2. **Gender Split:** The population is divided into males and females due to gender-specific usage patterns.
3. **Male Population Analysis:** Factors considered for males include age groups, life expectancy, preferred shaving methods, and shaving frequency.
4. **Female Population Analysis:** Similar considerations are applied to females, though with potentially less detail due to their lower shaving rates.
5. **Estimation Factors:** Assumptions include a 3 million population, equal gender distribution, an 80-year lifespan, age group distribution, varying shaving habits among men based on age and preference, and an assumption that most men use razor blades. Estimations for women are made with awareness of their lower shaving rates.

This systematic approach aims to provide a reasonable estimate of razor blade quantity, accounting for demographic variations and gender-specific habits. While these figures are estimates, they are grounded in logical statistics and assumptions that closely resemble real-world scenarios.



Gas Stations-Market Sizing

Prompt: Estimate the number of Gas stations in Paris.

Case information:

Population in Paris is estimated to be 2 Million people.

4 people per household.

For 10 cars we have a truck.

Capacity of each station is 4 machines.

Each car needs 5 minutes to fill.

4 Peak hours and 8 Non peak hours.

DEMAND PART:

Population: 2 Million

Households: $2,000,000/4=500,000$

Income classes(For Households): High income: 20% have 3 cars

Medium income: 50% have 1 car

Low income: 30% have 0.5 car

Weighted Average= $(20\% \times 3) + (50\% \times 1) + (30\% \times 0.5) = 625,000$ Cars.

Based on the case information, for each 10 cars we have one truck:

$625000/10=62,500$ trucks.

Total of vehicles: $625,000+62,500=687,500$

SUPPLY PART:

Stations capacity: 4 machines(Each car needs 5 minuts to fill)

Each machine can fill 12 vehicles per hour($60\text{min}/5\text{min}=12$) so 4 machines can fill 48 vehicles every hour($4 \times 12=48$).

Opening hours: 12 hours/Day

Peak & Non Peak hours: 4 Peak hours

8 Non Peak hours

Hours	Occupancy
4 Peak hours	50% Occupancy $24 \times 4 = 96$
8 Non Peak hours	20% Occupancy $9.6 \times 8 = 76.8$

Number of vehicles that stop to fill in one day: $96 + 76.8 = 172.8$

Frequency (How many times vehicles fill weekly):

50% fill 3 times a week

30% fill 2 times a week

20% fill 1 time a week

Weighted Average = $(50\% \times 3) + (30\% \times 2) + (20\% \times 1) = 2.3$ times per week

Number of vehicles that fill per week: $2.3 \times 687500 = 1,581,250$

Number of vehicles that fill per day: $1581250 / 7 = 225,892$

Number of stations: $225892 / 172.8 = 1307$

Certainly, here's a concise summary of the market sizing approach for determining the number of gas stations in Paris:

Demand Analysis:

Begin by estimating the number of households in Paris, assuming a typical family size. Consider income levels to determine the average number of vehicles per income class. Calculate the total number of vehicles in Paris, including cars and trucks.

Supply Analysis:

Assess gas station data, including average capacity, operating hours, and peak/non-peak periods.

Estimate the number of cars visiting stations during peak and non-peak hours.

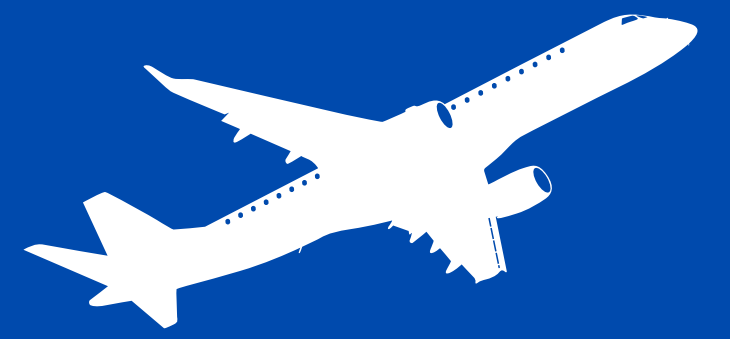
Account for car fill-up frequency and weekly patterns to determine the weekly station visits.

Calculate the daily average of vehicles visiting stations.

Finally, determine the required number of gas stations based on the demand analysis.

Logical Estimations:

Ensure all calculations are grounded in reasonable and logical estimations, considering factors like family size, income, and vehicle ratios.



MEA direct flights-Profitability

Prompt: MEA wants to organize flights from Beirut to Riyadh, is this a good idea?

Case information:

Plane is 100m long 10m large, Business class is 20m long and Economy class 80m long.

Consider that we have 2m large path for Business class and 1.5m for Economy class. Seats in Business class are 1.5m large and 2m long, seats in Economy class are 1m large and 1m long.

Occupancy: E class- 70% Low season/ 90% High season

B class- 50% Low season/ 70% High Season

Ticket prices: E class- 900\$ Low season/ 2000\$ High season

B class-1800\$ Low season/ 3000\$ High season

50 flights for High season and 50 flights for low season

MARKET: Economic situation is stable and doing well

Many people travel between Beirut and Riyadh

No barriers to organize the direct flights

No competitors so we are alone in the market

We should always see the size of the market

SIZE:

Plane capacity(We should calculate the surface of the plane with the information that we have): Business Class: $L \times l = 20 \times (10 - 2) = 160$ sqm

Economy Class: $L \times l = 80 \times (10 - 1.5) = 680$ sqm

Number of seats: Business Class: $L \times l = 2 \times 1.5 = 3$ sqm so $160 / 3 = 53$ seats

Economy Class: $L \times l = 1 \times 1 = 1$ sqm so $680 / 1 = 680$ Seats

Occupancy and ticket prices:

	Economy class	Business class
Low season	70% Occupancy 900\$ Ticket price	50% Occupancy 1800\$ Ticket price
High season	90% Occupancy 2000\$ Ticket price	70% Occupancy 3000\$ Ticket price

	Economy class	Business class
Low season	680 seats x 70%=476 476x900\$=400,000\$	50 seats x 50%=25 25x1800\$=45,000\$
High season	680 seats x 90%=612 612x2000\$=1,200,000\$	50 seats x 70%=35 35x3000=105,000\$

MEA earn 445000\$ from this flight on Low season and 1,305,000\$ on High season

We have 50 flights for Low season: $50 \times 445,000 = 22,250,000\$$

We have 50 flights for High season: $50 \times 1,305,000 = 65,250,000\$$

Total Revenue from this project: $22,250,000 + 65,250,000 = 87,500,000\$$

PROFITABILITY:

Revenues(Calculated previously)= 87.5 million\$

We don't have any other revenue streams.

Costs:

-Variable costs: None

-Fixed costs: Plane parking

Labor wages

Insurance

Maintenance

Fuel

Total costs(By estimation):

Fixed costs+ Variable costs= $45,000,000+0= 45,000,000\$$

Costs are given by the interviewer usually.

Profits:

Revenues-Costs= $87,500,000-45,000,000=42,500,000\$$

If we are asked to find the Breakeven period:

Initial Investment(Always given by the interviewer)= $70,000,000\$$

Breakeven Period: Initial investment/Profit= $70,000,000/42,500,000=1.65$ Years.

Here's a concise summary of the profitability case involving airline operations between Beirut and Riyadh:

Market Assessment:

Start by evaluating economic stability and investment feasibility.

Determine demand for travel between Beirut and Riyadh.

Identify potential market obstacles and competitors.

Market Sizing:

Calculate market size based on the airplane's capacity parameters.

Revenue Calculation:

Analyze occupancy rates and average ticket prices for business and economy class during low and high seasons.

Multiply the annual number of flights by income per plane for each season and class.

Calculate the total revenue generated by all aircraft operating on the route.

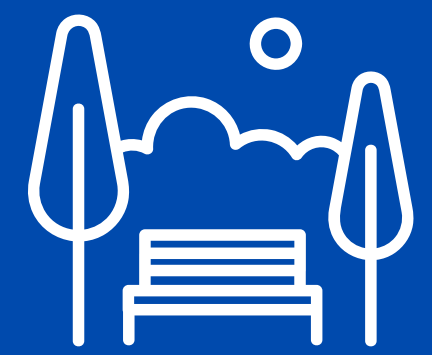
Cost Assessment:

Analyze and compute various costs associated with airline operations as provided.

Subtract these costs from the calculated revenue to determine profitability.

Breakeven Analysis:

Calculate the breakeven period by dividing the initial investment by earnings.



Themed Park-Profitability

Prompt: Our client opened a Themed Park in Jeddah, he wants to see if it's a good idea.

Case information:

Population in Jeddah is estimated to be 4 Million people.

Life expectancy is 80 years old.

For each 5 Jeddah citizens we have one person coming from outside the city.

Ticket price is 200\$ and Food costs 150\$ per visitor.

Initial investment is 4,000,000,000\$.

MARKET: Economy is stable and doing well

It is a trend for people to visit Themed Parks

No barriers but we should have a Saudi partner

We should see the size of the project

SIZE:

Population of Jeddah: 4 million

Life Expectancy: 80 years old

0-20Yrs: 25%-1,000,000

20-40Yrs: 25%-1,000,000

40-60Yrs: 25%-1,000,000

60-80Yrs: 25%-1,000,000

Number of visitors:

0-20Yrs: 80% of 1,000,000=800,000

20-40Yrs: 50% of 1,000,000=500,000

40-60Yrs: 30% of 1,000,000=300,000

60-80Yrs: 20% of 1,000,000=200,000

Total of visitors is 1.800.000



Based on the information, for each 5 visitors from Jeddah we have one from outside the city:
 $1,800,000/5=360,000$

Total of visitors: $1,800,000+360,000=2,160,000$

Frequency: 50% visit 1 Time/2Year

30% visit 2 Times/Year

20% visit 3 Times/Year

Weighted Average= $(50%\times 0.5)+(30%\times 2)+(20%\times 3)=1,45$ Times/Year.

Number of visitors per year: $1,45\times 2,160,000=3,132,000$

PROFITABILITY:

Revenues: Ticket prices(200\$/Pers)

Food(150\$/Pers)

No other revenue streams.

Revenue: $200\times 3,132,000+(150\times 3,132,000)=1,096,200,000\$$

Costs:

-Variable costs: None

-Fixed costs: Rent

Labor wages

Insurance

Utilities

Marketing

Maintenance

Total Costs(By estimation):

Fixed costs+ Variable costs= $0+800,000,000=800,000,000\$$

Profit:

$$\text{Revenue}-\text{Costs}=1,096,200,000-800,000,000=296,200,000\$$$

If we are asked to find the Breakeven period:

$$\text{Initial investment}:4,000,000,000\$$$

$$\text{Breakeven Period}: 4,000,000,000/296200,000=13.5 \text{ Years.}$$

Here's a concise summary of the profitability case for a theme park in Jeddah:

Market Assessment:

Start by evaluating the market's viability and potential obstacles.

Ensure there are no significant rivals or constraints that could affect the project.

Market Sizing:

Determine the market size by assessing demand.

Calculate the market size based on Jeddah's population, life expectancy, and age groups.

Estimate the number of visitors in each age group.

Account for visitors from outside Jeddah, considering both tourists and locals.

Calculate the total number of expected visitors annually.

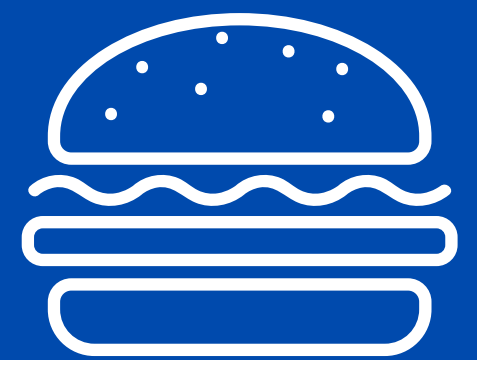
Profitability Analysis:

Analyze various income sources, including admission fees and meal costs.

Calculate total income by multiplying these costs by the estimated annual visitor count.

Estimate operational costs, with the interviewee providing specific cost data.

Determine the theme park's profit by subtracting total costs from total income.



Burger Restaurant-Market Entry

Prompt: Our friend owns a restaurant in Beirut, he wants to expand to the UAE and see if it's a good idea.

Case information:

Population in Dubai is estimated to be 4 Million people.

Life expectancy is 80 years old.

Our friend can cap 1% of the market.

Each Burger meal costs 15\$.

Initial investment is 10,000,000\$

Costs to be given later.

MARKET: Economy is stable and doing well

Most people in Dubai like burger restaurants

No barriers to stop the project

We should see the size of the Burger market.

SIZE:

Population of Dubai: 4 million

Life Expectancy: 80 years old

0-20Yrs: 25%-1,000,000

20-40Yrs: 25%-1,000,000

40-60Yrs: 25%-1,000,000

60-80Yrs: 25%-1,000,000

Number of burger eaters:

0-20Yrs: 70% of 1,000,000=700,000

20-40Yrs: 80% of 1,000,000=800,000

40-60Yrs: 40% of 1,000,000=400,000

60-80Yrs: 20% of 1,000,000=200,000

Total of visitors is 2.100.000

Frequency: 30% eat 3 Burgers/Week

50% eat 1 Burger/week

20% visit 1 Burger/2 Weeks

Weighted Average= $(30\% \times 3) + (50\% \times 1) + (20\% \times 0.5) = 1,5$ Burgers/Week.

Number of Burgers per week: $1,5 \times 2,100,000 = 3,150,000$

Number of Burgers per year: $3,150,000 \times 50 = 157,500,000$

MARKET ENTRY:

Based on the information, the restaurant owner can cap 1% of the market.

Market cap= $1\% \times 157,500,000 = 1,575,000$ Burgers

Our client needs to find the proper way to enter the Burger market, he's starting everything from scratch so he has to adopt the Green Development plan.

PROFITABILITY:

Revenues: Each Burger meal costs 15\$

No other revenue streams

Revenue= $15 \times 1,575,000 = 23,625,000$ \$

Costs:

-Variable costs: COGS

Inventory

Transportation

-Fixed costs: Rent

Labor wages

Insurance

Utilities

Marketing

Maintenance

Total Costs(By estimation):

Fixed costs+ Variable costs= 6,500,000+12,000,000=18,500,000\$

Profit:

Revenue-Costs= 23,625,000-18,500,000=5,125,000\$

If we are asked to find the Breakeven period:

Initial investment:10,000,000\$

Breakeven Period: 10,000,000/5,125,000=1.95 Years

Here's a concise summary of the market entry and profitability case for a burger business in Dubai:

Market Entry Assessment:

Start by assessing Dubai's economic stability.

Determine the locals' appetite for burgers.

Evaluate the size of the burger market.

Market Sizing:

Calculate the market size based on demand, considering population (estimated at 4 million), life expectancy, and age groups.

Estimate burger consumption frequency and quantity per person weekly to determine annual sales.

Market Entry Strategy:

Opt for the green development strategy, creating a burger restaurant from scratch.

Allocate a market share of 1% based on information provided.

Profitability Analysis:

Calculate income by identifying revenue sources and estimating burger prices (\$15).

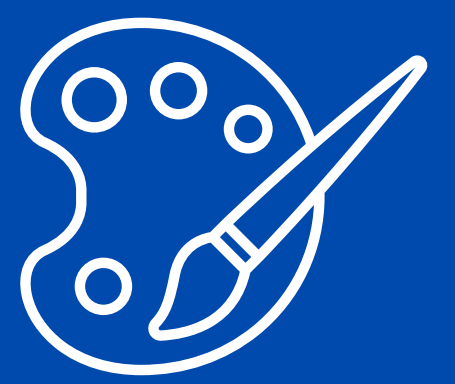
Multiply prices by the expected annual burger sales to determine total revenue.

Estimate and deduct expected expenses.

Determine profitability by subtracting expenses from revenues.

Breakeven Analysis:

Calculate the breakeven point by dividing the initial investment by profits.



Gallons of paint-Market Sizing

Prompt: Estimate the number of Gallons of Paint that are needed to paint Beirut houses.

Case information:

Population in Beirut is estimated to be 2 Million people.

4 people per household.

Each household owns a single house.

Each Burger meal costs 15\$.

The ceiling is equivalent to 2 walls.

2 walls needs one gallon of paint.

We have to paint the whole house.

Population of Beirut: 2 million

4 people per household: $2,000,000/4=500,000$ Households

Each household owns one house so 500,000 houses in total.

Number of rooms per house:

High income: 20%- 10 rooms

Middle income: 50%- 8 rooms

Low income: 30%- 5 rooms

Weighted Average= $(20\% \times 10) + (50\% \times 8) + (30\% \times 5) = 7,5$ rooms per house.

Based on the information the ceiling is equivalent to 2 walls.

Number of walls per room: $2+1+1+1+1=6$

Number of walls per house: $6 \times 7,5 = 45$

Frequency(How many years to repaint the walls):

20% are High income people, they repaint each 2 years.

50% are Middle income people, they repaint each 5 years.

30% are Low income people, they repaint each 10 years.

Weighted Average= $(20\% \times 1/2) + (50\% \times 1/5) + (30\% \times 1/10) = 0,2$ Times/Year.

Number of walls in total: $45 \times 500,000 = 22,500,000$

Number of walls painted per year: $22,500,000 \times 0,2 = 4,500,000$

Number of Gallons per year:

Based on the information we need one gallon for 2 walls.

$4,500,000 / 2 = 2,250,000$

here's a concise summary of the market sizing case for determining the quantity of paint required to paint homes in Beirut:

1. Population Assessment:

Estimate Beirut's population (expected to be 2 million).

Calculate the number of households (assuming an average household size of 4 individuals).

2. Room Estimation:

Determine the number of rooms in each home based on income class, recognizing higher-income households have more rooms.

3. Wall Analysis:

Gather data on rooms and walls to estimate the typical number of walls in a home. Establish the time needed to paint a wall.

4. Repainting Frequency:

Assess the duration a painted wall lasts before needing repainting.

Consider income groups, acknowledging higher-income families may repaint walls more frequently.

5. Walls Painted Annually:

Calculate the total number of walls in homes.

Multiply by the average annual repainting frequency to determine walls painted annually.

6. Paint Quantity Calculation:

Determine the quantity of paint needed to paint each wall.



Opera house-Profitability

Prompt: The government wants to open an Opera house in Beirut, we want to see the profitability and the breakeven period.

Case information:

The Opera contains 1000 seats, 900 are regular and 100 are VIP.

There is only one show per week.

Same occupancy for every show.

VIP ticket costs 250\$ and regular ticket costs 100\$

There is an additional 10% on the tickets for food.

Initial investment is 1,500,000\$

Costs make up 80% of total revenues.

MARKET: Economic situation is stable and doing well

Many people are Opera fans

The government is doing the project so no barriers

No competitors so there will be only one Opera house

We should always see the size of the Opera house

SIZE:

Capacity:

Number of seats: Regular seats: 900

VIP seats: 100

Total seats: 1000

Opening hours: Opera opens once a week for only one show.

Occupancy:

Based on the information, all the shows have the same occupancy.



VIP: 70% occupancy=70

Regular:40%=360

PROFITABILITY:

Based on the information, VIP ticket costs 250\$ and Regular ticket costs 100\$, we have 10% added that goes for food.

Total ticket price: VIP: $(1+10\%) \times 250 = 275\$$

Regular: $(1+10\%) \times 100 = 110\$$

Revenues: Ticket prices(With food)

No other revenue streams

Revenue: VIP: $275 \times 70 = 19430$

Regular: $110 \times 360 = 39600$

Total revenue=58,850\$(per week)

Total revenue per year= $58,850 \times 50 = 2,942,500\$$

Costs:-Variable costs: COGS

-Fixed costs: Labor wages

Rent

Insurance

Utilities

We were told that the costs make up 80% of total revenues.

Total costs= $80\% \times 2,942,500 = 2,354,000\$$

Profit:

Revenue-costs= $2,942,500 - 2,354,000 = 588,500\$$

Breakeven Period: Initial investment/Profit= $1,500,000 / 588,500 = 2,5$ years.

Here's an even more concise and structured summary of the profitability case for the Lebanese government's opera house project:

1. Project Overview:

Evaluate the profitability of launching an opera house project in Lebanon.

2. Market Assessment:

Gauge public interest in opera.

Analyze the competitive landscape within the opera industry.

Note that the project faces no significant obstacles as it's government-driven.

3. Opera House Sizing:

Determine the opera's seating capacity, including VIP and regular seating.

Examine operating hours and occupancy rates for one weekly performance.

4. Revenue Estimation:

Estimate revenue by multiplying VIP and regular ticket prices by expected event attendance.

Calculate total annual revenue by projecting income per event across the year.

5. Cost Evaluation:

Assess operational costs, factoring in provided case-specific inputs.

6. Profitability Analysis:

Determine overall project profitability by deducting total costs from total revenue.

Calculate the breakeven point by dividing the initial investment by the projected profit.



Tobacco company-Market Entry

Prompt: Our client is a Tobacco company. They hired us to know if they should enter the Saudi market and how to enter it.

Case information:

Population in KSA is estimated to be 30 Million people.

Life expectancy is 80 years old.

1 shisha is equal to 0,25g of tobacco.

50g of tobacco cost 5\$.

50% of the market owned by a foreign competitor, 30% by a local one and 20% by small competitors.

Profit margin is between 30% and 40%.

MARKET: There's a high demand on shisha.

We have a few competitors on this market.

Saudi partner is required to enter the market.

We should see the size of the Tobacco market.

SIZE:

Population of Dubai: 30 million

Life Expectancy: 80 years old

0-20Yrs: 25%-7,500,000

20-40Yrs: 25%-7,500,000

40-60Yrs: 25%-7,500,000

60-80Yrs: 25%-7,500,000

Number of burger eaters:

0-20Yrs: 10% of 7,500,000=750,000

20-40Yrs: 30% of 7,500,000=2,250,000

40-60Yrs: 50% of 7,500,000=3,750,000

60-80Yrs: 20% of 7,500,000=1,500,000

Total consumers of shisha is 8,250,000

Frequency:-Frequent: 50% consume half a shisha per day
-Non Frequent: 50% consume half a shisha per week

Weighted Average= $(0,5 \times 3,5) + (0,5 \times 0,5) = 2$ Shisha/week

Number of Shisha per week(Per person): $1,75 + 0,25 = 2$

Number of Shisha per year(Per person): $2 \times 50 = 100$

Number of Shisha used per year: $100 \times 8,250,000 = 825,000,000$

Based on the information, we have that 1 shisha needs 0,25g of Tobacco and one pack(50g of Tobacco) cost 5\$.

Total grams of Tobacco= $825,000,000 \times 0,25 = 206,250,000$

Total packs of Tobacco= $206,250,000 / 50 = 4,125,000$

Total price of Tobacco pack= $4,125,000 \times 5 = 20,625,000$ \$

MARKET ENTRY:

Based on the information, One foreign player owns 50% of the market, one local player owns 30% and the rest of competitors own 20% of it.

Our client needs to find the proper way to enter the Tobacco market, We will advice him to start and acquire from small competitors.

20% of the market(Market share of the small competitors): $20\% \times 20,625,000 = 4,125,000$ \$

If we are asked to find the profit margin:

Based on the information, profit margin is set between 30% and 40%.

Profit margin: $30\% \times 4,125,000 = 1,237,500$

$40\% \times 4,125,000 = 1,650,000$

Profit margin is set between 1,237,500\$ and 1,650,000\$.

Here's a concise summary of the market entry case for the tobacco industry in Saudi Arabia:

Market Entry Assessment:

Evaluate the feasibility of entering the tobacco market.

Market Research:

Assess the economic stability of the market.

Seek potential Saudi partners for collaboration.

Identify the number of existing tobacco suppliers and rivals.

Market Sizing:

Calculate market size based on demand factors.

Estimate Saudi Arabia's population (30 million), life expectancy (80 years), and evenly distributed age groups.

Determine shisha consumers in each age category.

Analyze the frequency and average weekly consumption of shisha users.

Calculate the total annual shisha consumption in the market.

Market Entry Strategy:

Consider market entry options, especially in a market with two major rivals and smaller players holding 20% of the market.

Evaluate the possibility of acquiring smaller suppliers as an entry strategy.

Estimate the market share acquired through this approach.

Profitability Analysis:

Assess the project's profit margin based on the market share and pricing strategy.



MAZDA cars-Market Sizing

Prompt: Estimate the number of new cars that MAZDA sold in Lebanon in 2019.

Case information:

Population in Lebanon is estimated to be 6 Million people.

4 people per household.

MAZDA sell all of their cars that year.

Further information are given through the case.

Population of Lebanon: 6 million

4 people per household: $6,000,000/4=1,500,000$ Households

Number of cars per household(Based on income):

High income: 20%- 5 cars: $300,000 \times 5=1,500,000$ cars

Middle income: 50%- 3 cars: $750,000 \times 3=2,250,000$ cars

Low income: 30%- 1 car: $450,000 \times 1= 450,000$ cars

Life span(How much time to change a car):

High income: 5 years= $1,500,000/5= 300,000$ cars/year

Middle income: 10 years= $2,250,000/10=225,000$ cars/year

Low income: 15 years= $450,000/15=30,000$ cars/year

Total number of cars sold per year: $300,000+225,000+30,000=555,000$

Number of new MAZDAs sold between these cars:

High income: 10% of $300,000=30,000$ MAZDAs

Middle income: 10% of $225,000= 22,500$ MAZDAs

Low income: 0% of $30,000=0$ MAZDAs

Total number of MAZDAs sold per year= $30,000+22,500=52,500$ cars

If they ask us to find the Market share:

Market share:

Number of MAZDAs/Number of cars= $52,500/555,000=9.5\%$

Here's a concise summary of the market sizing case for estimating MAZDA vehicle sales in Lebanon:

Market Sizing Steps:

1. Population Assessment:

Estimate Lebanon's population, projected to be 6 million people.

2. Household Estimation:

Calculate the number of households based on an average of four people per family.

3. Income Level Consideration:

Determine income levels among households to predict vehicle ownership.

Assume vehicle ownership: five for high-income families, three for medium-income, and one for low-income.

4. Vehicle Replacement Frequency:

Consider the frequency of car replacement based on income groups:

High-income families replace cars every five years.

Medium-income families replace cars every ten years.

Low-income families replace cars less frequently (e.g., every fifteen years).

5. Mazda Sales Estimation:

Estimate annual MAZDA car purchases by assuming 10% of high and medium-income families buy new MAZDAs, while none from the lower-income group do.

6. Market Share Calculation:

Calculate the total number of MAZDAs sold annually.

Determine market share by dividing MAZDA sales by the total car sales in the market.



Broadcasting company-Profitability

Prompt: Our client is a family business in Dubai, they want to acquire a new TV Broadcasting company. Is it a good idea?

Case information:

Every hour of Broadcasting is divided between 10 minutes of ads and 50 minutes of streaming.

4 peak hours and 20 non peak hours per day.

Each minute of ads at a peak hour generates 250\$

Each minute of ads at a non peak hour generates 100\$.

The Breakeven goal is 5 years.

PROFITABILITY:

Based on the information, 1 minute of advertisement at a peak hour generates 250\$, we have 4 peak hours per day. Also 1 minute of advertisement at a non peak hour generates 100\$, we have 20 non peak hours per day.

Revenues:

-4 Peak hours a day: 4×10 minutes of Ads = 40 mins of Ads

Total of money generated from 40 mins of Ads per day = $40 \times 250 = 10,000$ \$

-20 Non Peak hours a day: 20×10 minutes of Ads = 200 mins of Ads

Total of money generated from 200 mins of Ads per day = $200 \times 100 = 20,000$ \$

Total revenue per day = $10,000 + 20,000 = 30,000$ \$

Total revenue per year = $30,000 \times 365 = 10,950,000$ \$

Costs(Per year): Running Operations: 6,000,000\$

The costs are mainly Labor wages

Total costs are 6,000,000\$

Profit:

Revenue-costs=10,950,000-6,000,000=4,950,000\$

Breakeven Period:

Based on the information ,the Breakeven Goal is 5 years

Initial investment/Profit= $X/4,950,000=5$ years.

$x=5 \times 4,950,000=24,750,000$ \$(Initial investment).

Here's a summarized version of the case and how it was solved:

1. Profitability Assessment:

Evaluate the potential profitability of acquiring a broadcasting company.

2. Revenue Calculation:

Focus on the company's primary income sources: advertising and public relations.

Obtain advertising rates for one minute during peak and off-peak hours.

Identify peak and off-peak hours based on audience size.

Calculate daily income by multiplying the total minutes for peak and off-peak hours by the respective advertising rates.

Determine annual revenue by extrapolating daily income over the year.

3. Cost Estimation:

Assess operational expenses, including labor and maintenance costs, provided by the interviewee.

4. Profitability Analysis:

Determine yearly profit by subtracting total expenses from annual revenue.

Calculate the breakeven point by dividing the initial investment from the case data by the total profit.



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