Background:

Helen Dun Consulting Group (HDCG) is one of the biggest consulting firms in the world, with clients across 52 countries and covering almost every business domain you have ever heard of. However, a majority of its clients are into Retail, Transportation, FMCG and Pharmaceutical sectors. It was founded 30 years ago, with the vision to enhance the business capability of clients, backing their solutions with data, latest analysis tools, domain expertise and the brightest consulting minds with top profiles. HDCG gives extensive importance to data analysis and the quality of the solution. That is why it has succeeded in capturing such a large and reputed client base. Imagine yourself as a recent B-school graduate, hired at HDCG as an Associate Consultant. Your problem-solving skills, domain expertise, business logic, and visionary mindset will play an important role in distinguishing you from your colleagues at HDCG.

Your first client is PrimaPlanta, a reputed India based FMCG company, that specializes in this sector. It is one of the leaders in the industry and has left its mark on the customers, by maintaining consistency in quality, demand-study, marketing approach, and appeal to the youth. Ask a regular Indian teen about PrimaPlanta, and he/she will tell you a story about how wonderful his first day in college was, wearing one.

On your first day, working as an HDCG Consultant for PrimaPlanta, you get an e-mail from the client, which contains the following:

"Dear,

Greetings from PrimaPlanta!

We are a leading FMCG company facing a particular issue with our current business model. I think that we might be in need of HDCG's known expertise and guidance in moving ahead. Here is some information that might help you be clear with the scenario:

Type of problem: Market entry for the existing Product & setup

Description:

PrimaPlanta has been able to market the products really well since the last two financial years. Moreover, our Marketing efforts were catching and productive.

We want to enter in the market for a new product with large market penetration as the objective. Hence, your expertise and guidance are required for the same.

Thanks & regards."

PrimaPlanta team,

Sector 59, CyberScape Building, Gurgaon, Haryana

India.

The fourth-largest sector in the Indian Economy is the FMCG market, the industry is on the front-foot with an expected rise at a CAGR of 14.9%, the market is set to reach US$220 billion by 2025. The sector witnessed healthy FDI inflow of US$18.59 billion from April 2000 to June 2021.

The food & beverages sector accounts for a whopping 19% of the FMCG market. The food & beverage market is primarily driven by growing urbanisation and rapidly surging young population who are shifting consumer demands. With the living standards being upgraded and fast-tracked, FMCG is receiving surplus consumers from the food and beverage sector. For the same reason the food & beverage sector accounts for nearly 3% of India's GDP.

The food and beverage sector further branches into organised and unorganised sectors where a constant tussle is in permanence between the two. There is much potential to be unlocked and thus the companies are spending millions of dollars in market research and analysis to go full throttle.

Primaplanta Enterprises, an FMCG giant in India that has been dominant on the ground where it stands on is on the move to cover expand influence and explore wider opportunities and enter more competitive but profitable grounds. As preparation is imperative to any task at hand, the market analysis is the key to avoiding quicksand of market expansion. The company aims to kickstart the new operations by 2020. Primaplanta did extensive market research and gathered boatload of data which is provided below.

Given below is the FMCG market size, competitors' as well as Primaplanta's share in the market for the product XYZ. The market share however appears in an interesting form, in the face of the volume of customers.

Total no. of customer= 60 Cr
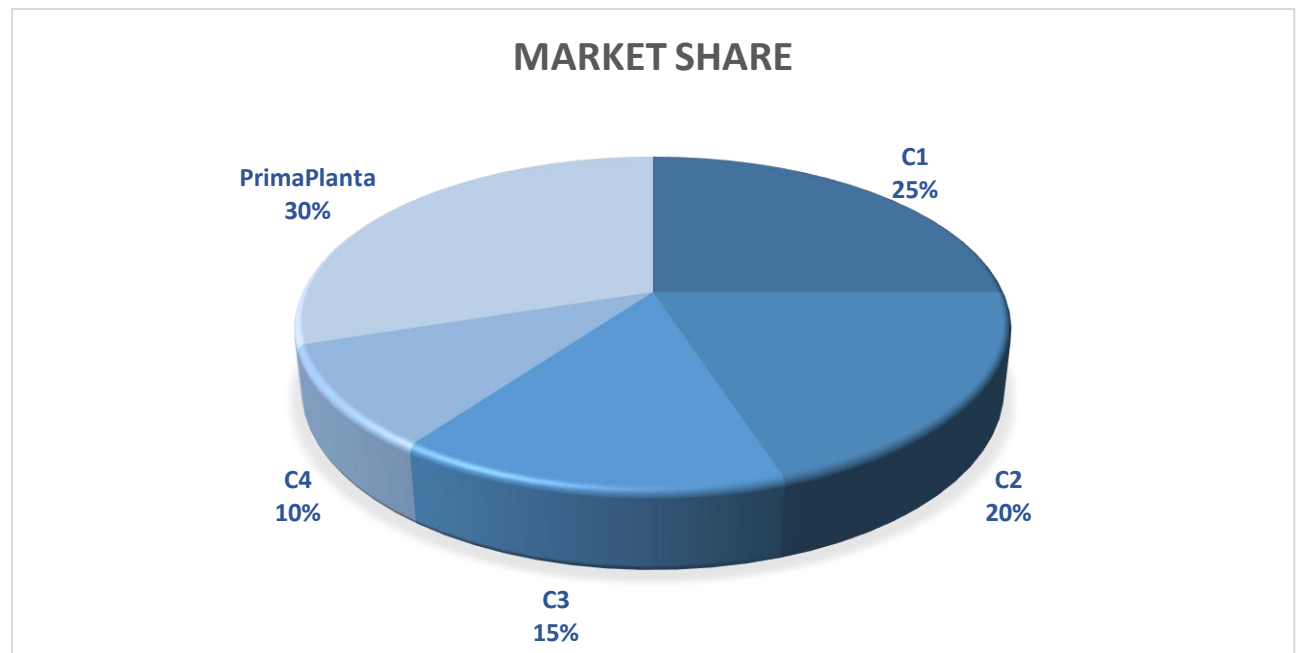
C_i represents the identity of the competing firm, where i = 1,2,3 etc.
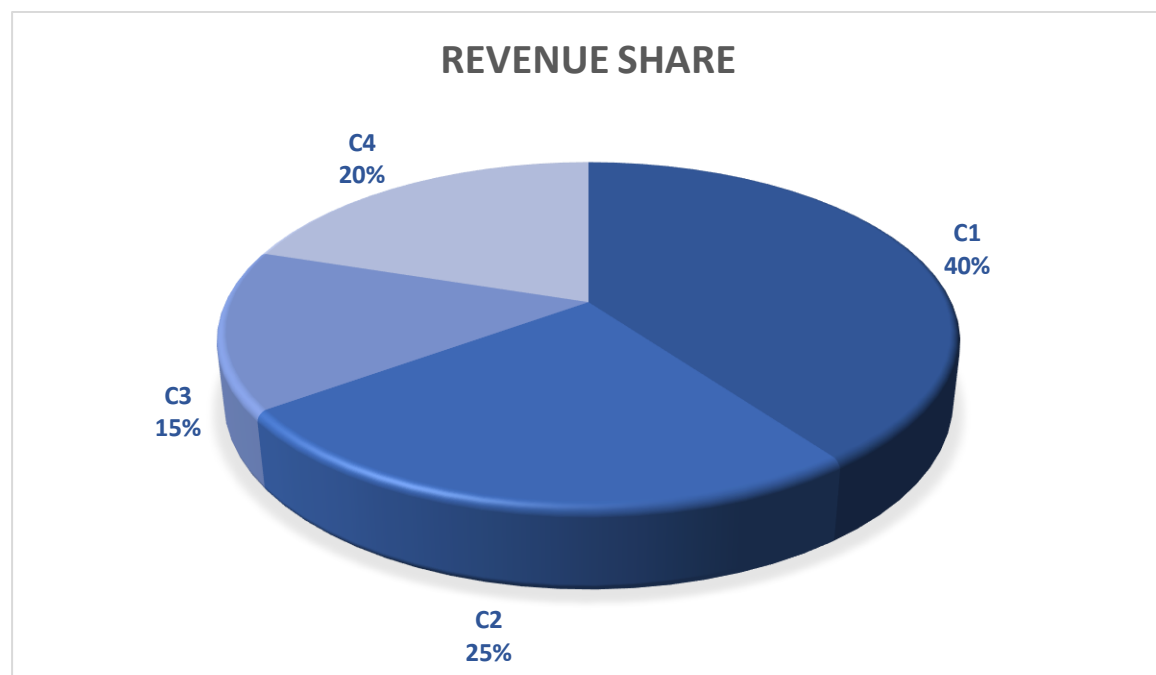
Market Entry

The company's operations were in full swing and thus the AGM (Annual General Meeting) was a cheerful one. The director and CFO sat with their executives at dinner when they were at the starters

with PQR, a business-like mind hardly ever rests, one of the executives suggested the idea of expanding operations in the PQR market, perhaps one would think it was his hangover of the afternoon whisky shots, why would a company with surging profits risk another adventure which might even end up posing existential threat if the exit strategy failed. But, that's not how business works, you strike when you are at your best and the proposition was received energetically by the director and the CFO.

Primaplanta wishes to launch a new existing product PQR in India, but let's first get you accustomed with the dynamics of PQR and why jumping in it is not a cakewalk. Products like PQR give the market its popular cliche of 'quicksand'. Rapid and pattern less movement of consumer opinion, unanticipated policy changes and vulnerability to even slight disruptions in supply chain are just a handful of a myriad problems of the sector.

So, what does PrimaPlanta do, deep-diving into the market conditions and appropriate risk-management protocols in place could save it from consumer decline, as market penetration is its immediate goal. The external factors are very much in the game as well, the industry is guarded by rogue competitors. Investment has to be the saviour against this, only through appropriate allotment against strictly managed channels can provide counterweight to the competitors' moves.

Market share of competitors for product PQR in terms of revenue is given below.

Total Revenue= 100 Cr

Further the following information is also given regarding the market growth in the year of entry.
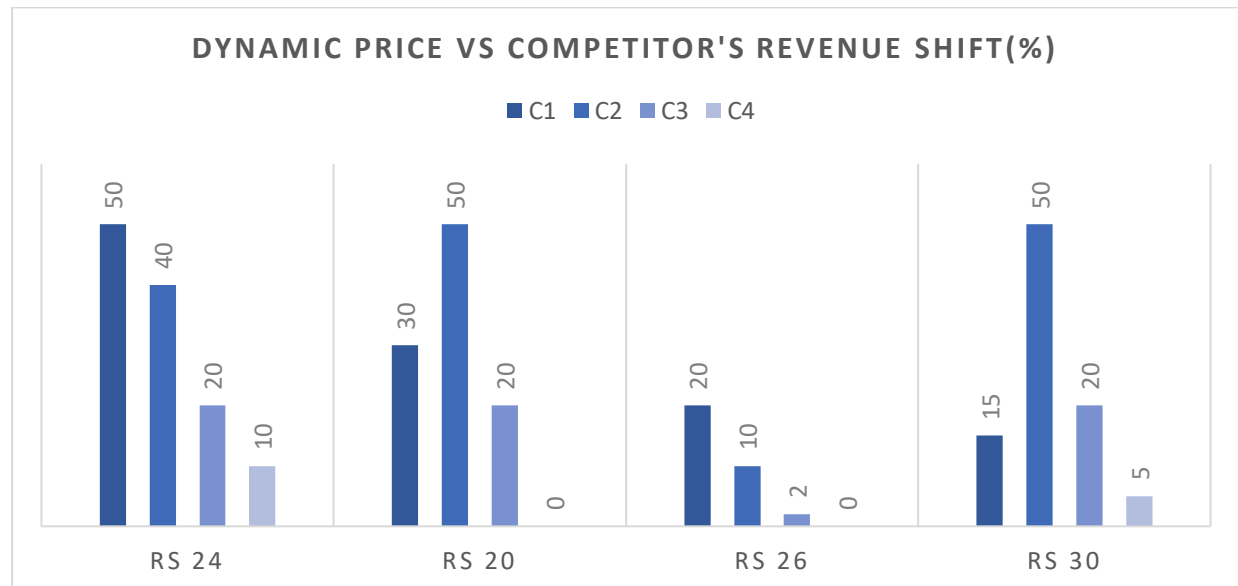
The market in 2022 is expected to expand by 10% with 5% falling in the share of Primaplanta Enterprises.

Pricing Strategy

The onus of deciding the price of Primaplanta's product falls upon as well, the decision is obviously guided to a wide extent upon the price at which the competitors sell the same product Judicious analysis will be required to set the optimal price so that the ultimate goal of is accomplished.

The chart given below is supposed to provide the decision with a locus of choices, all the choices are a reflection of how the market and consumer opinion would react to each of them. The data was extracted through multiple surveys, one of the surveys that was conducted on the ground went as deep as to analyse separate community of customers, their daily interactions with FMCG firms, the frequency of interaction and their overall opinion.

The chart below illustrates the consumer percentage shift from each of the competitor's share when a certain price is fixed by PRIMAPLANTA enterprises.

DYNAMIC PRICE VS COMPETITOR'S REVENUE SHIFT(%)

■ C1 ■ C2 ■ C3 ■ C4

RS 24: C1=50, C2=40, C3=20, C4=10
RS 20: C1=30, C2=50, C3=20, C4=0
RS 26: C1=20, C2=10, C3=2, C4=0
RS 30: C1=15, C2=50, C3=20, C4=5

Question 1

Based on the data given above what would be the optimal price to sell the Primaplanta product PQR?

Question 2

The next task that befalls upon you is to position the existing players of FMCG in terms of revenue for

(i)   Product PQR
(ii)   Product PQR and XYZ combined, if average revenue generated per customer annually for product XYZ is as follows:

C1	Rs 250
C2	Rs 150
C3	Rs 100
C4	Rs 200
Primaplanta	Rs 200

Question 3

Also, Calculate the Variable profit/unit for Product PQR to reach the market share set in Question (1) which comes after deciding the entry price. Fixed cost to reach Break Even Point is 14 Crore.

Sales & Operations

Transportation is the cost incurred in moving the finished goods from ware house to market and plant to warehouse. Following table gives the details for cost per unit for transportation from given four ware houses (W1, W2, W3, W4) to specified markets (X, Y, Z).

warehouse	market X	Market Y	Market Z	Supply
w1	14	65	35	400
w2	25	25	3	700
w3	45	35	65	600
w4	5	55	15	1300
Demand	600	800	1600	

Our client PrimaPlanta manufactures and markets one single shampoo "Bydandruff". "Bydandruff" is a shampoo popular with upper class population. PrimaPlanta has a sales team of 200 sales people to promote "Bydandruff". Currently, sales people visit both shops and warehouses to influence them to sell more of "Bydandruff". Market research has uncovered that end users actually are influenced by shop owner tactics to promote shampoo. In turn shop owners are influenced by warehouse owners to make buying decisions

How many sales people should be assigned to promote "Bydandruff" to shops?
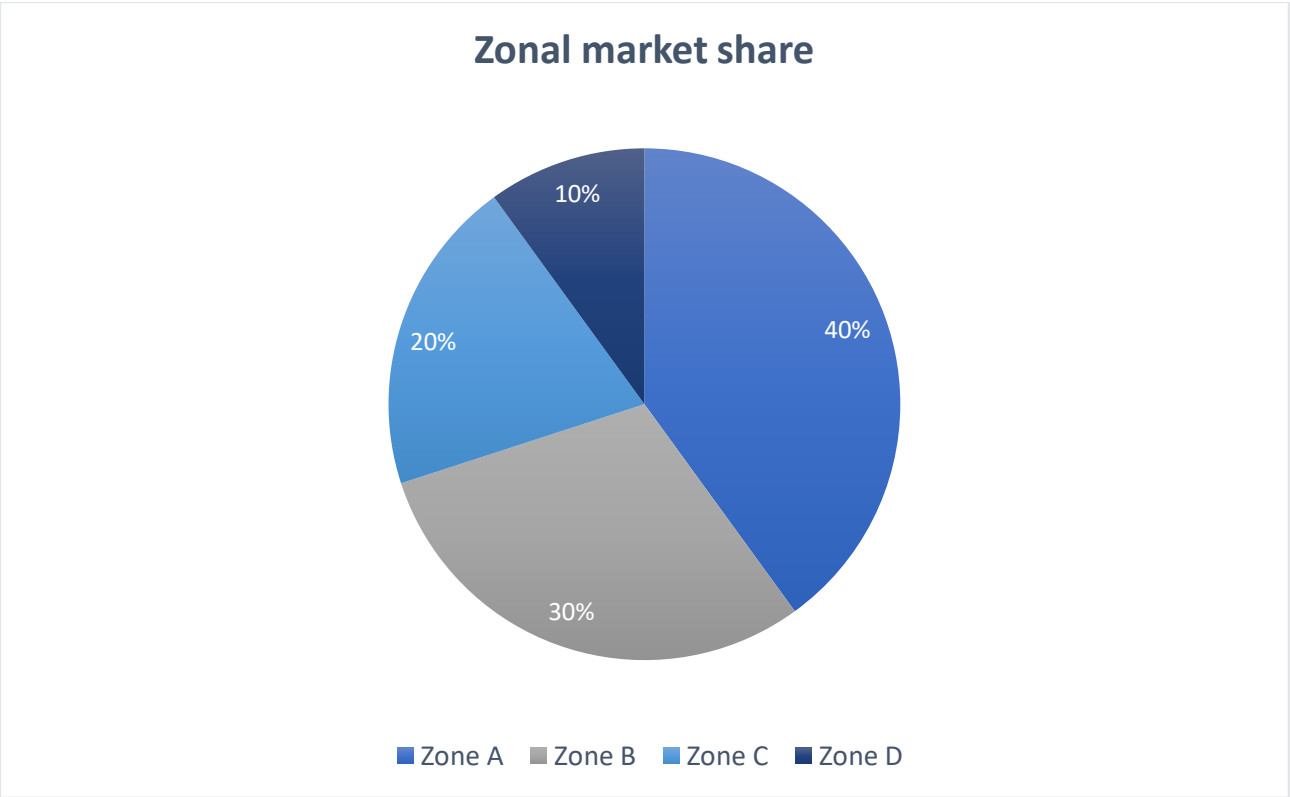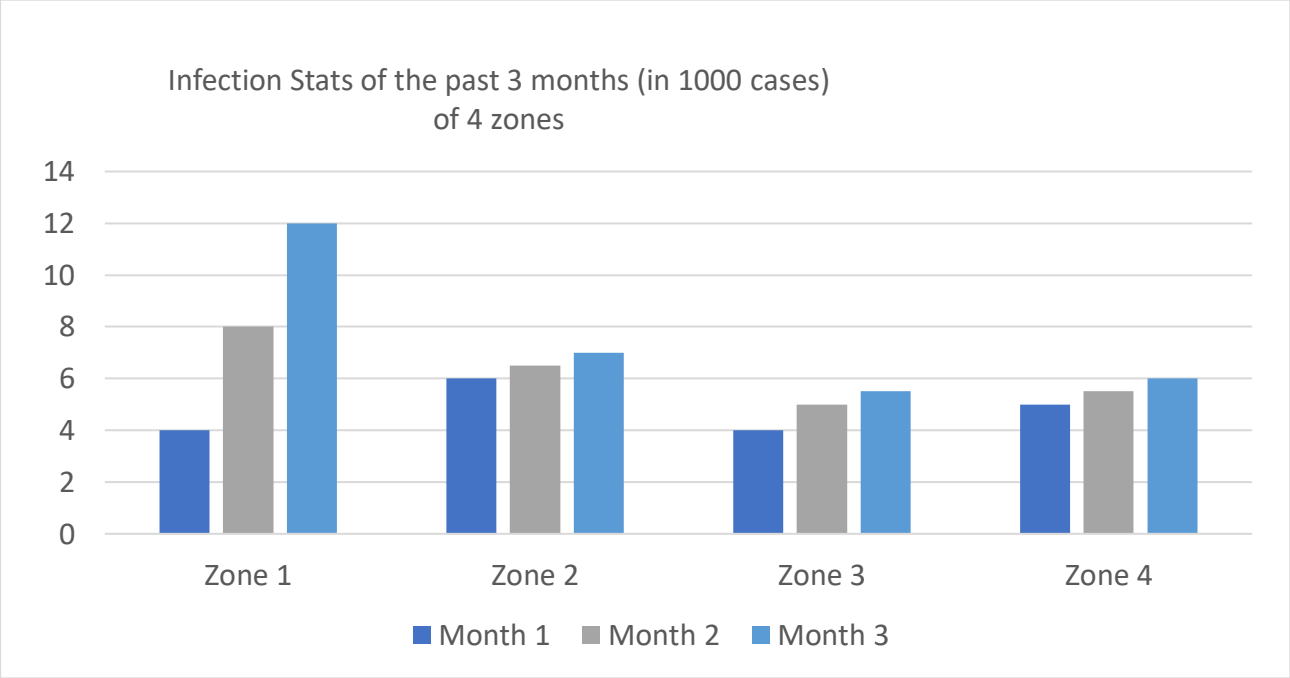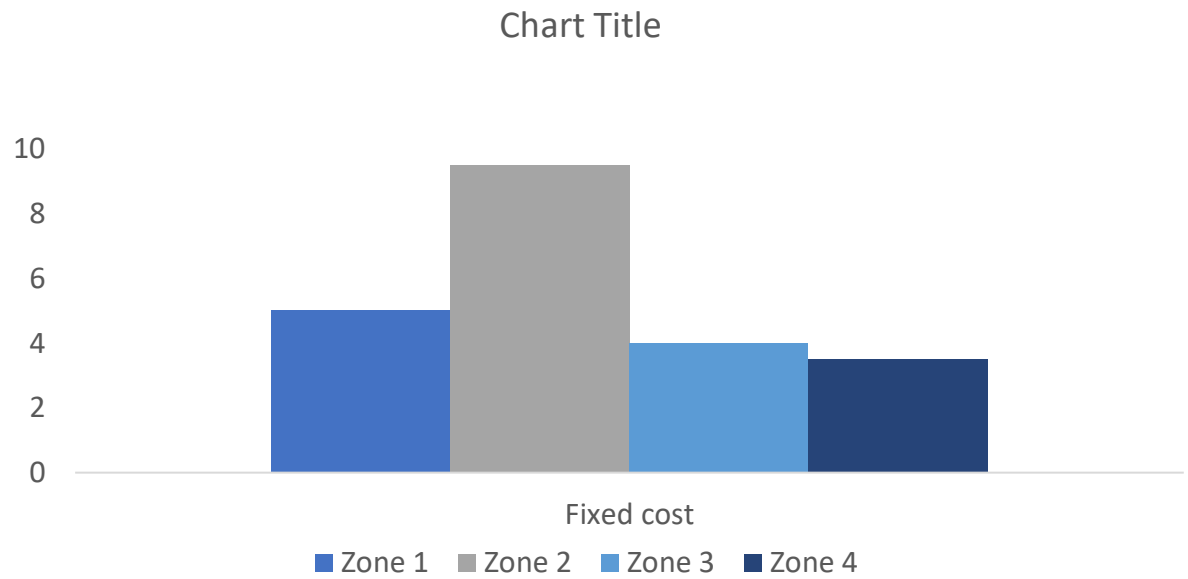
Plot of Influenced Sales to Visits
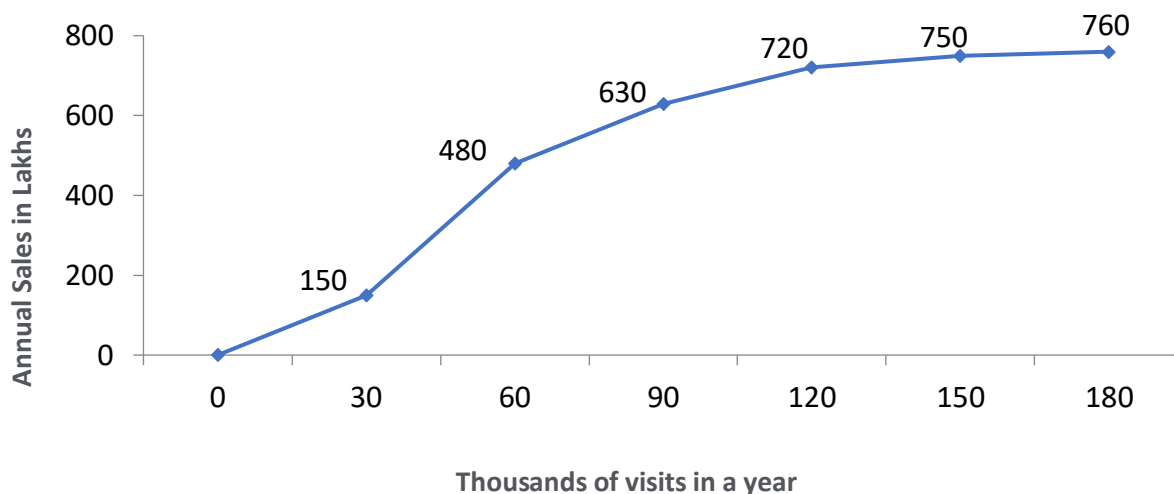
Sales people visiting shops cost Rs. 9,000/week and make 15 visits/week

Sales people work 40 weeks in a year.

Consider the following data charts containing the relevant data for the zonal market share, zonal infection statistics and zonal supply chain resumption costs.

Infection Stats of the past 3 months (in 1000 cases) of 4 zones

Legend: Month 1, Month 2, Month 3

Zonal market share

- Zone A: 40%
- Zone B: 30%
- Zone C: 20%
- Zone D: 10%

Legend: Zone A, Zone B, Zone C, Zone D

Chart Title

Fixed cost

■ Zone 1 ■ Zone 2 ■ Zone 3 ■ Zone 4

Which of the following is the best possible target zone for the company to commence its operations from a financial standpoint?

1. Zone 1
2. Zone 2
3. Zone 3
4. Zone 4

PLANT LOCATION

Selecting a plant location is an important factor for any industry and it depend on a number of factors such as availability of raw material, closeness to the market, demand in the market areas, transportation facilities, ease of export etc. Five such locations of plant have been proposed considering these factors, out of which **only one is needed to be selected**. The locations of plant are shown (BY STARS) in the figure below. The market locations are depicted by triangles.

Coordinates of each plant and market are given in centimetres with respect to chosen origin.

A scale of 300 km for 1 cm has been chosen.

You have to choose a location having minimum total setup costs (excluding inspection cost)
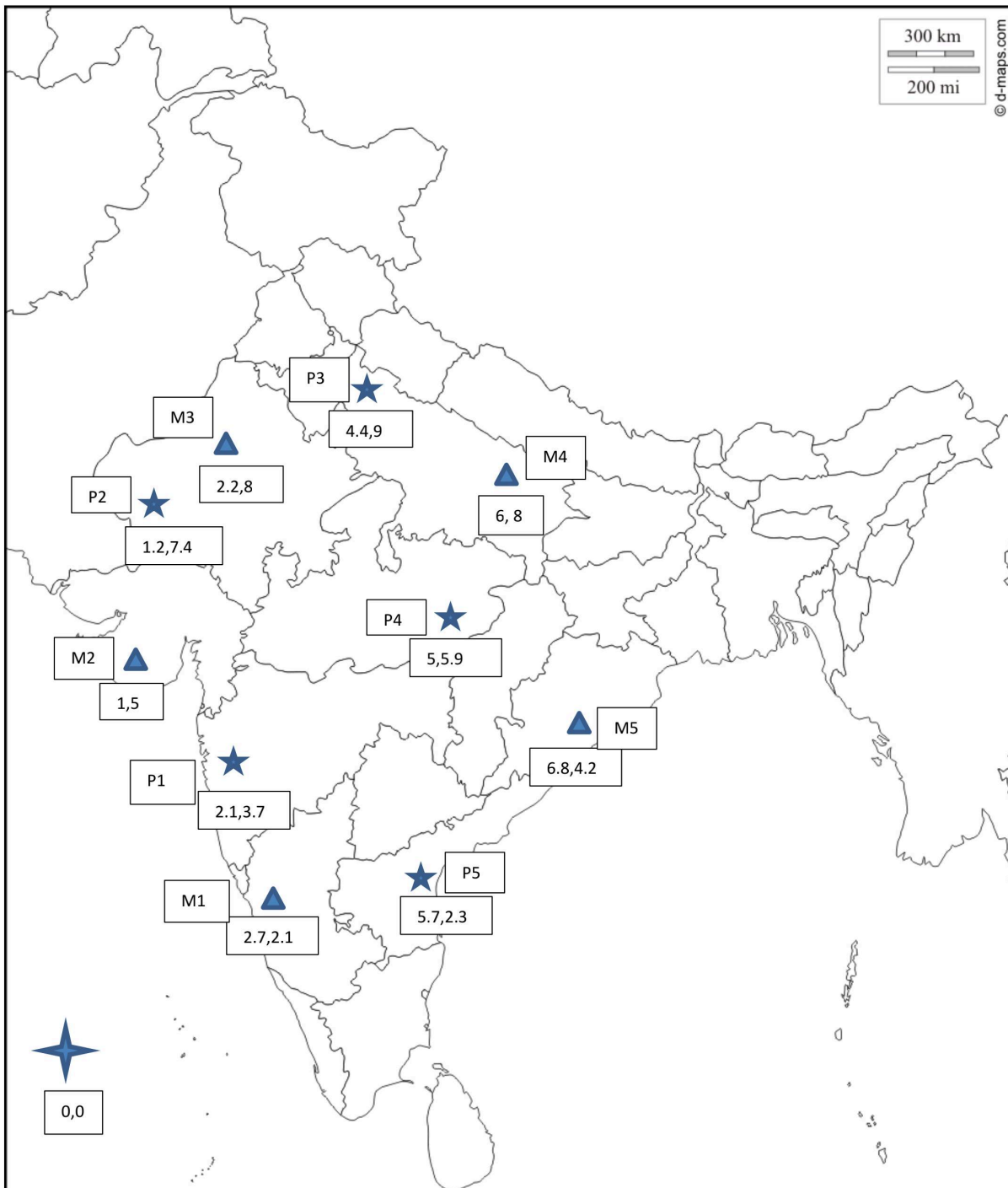
Fixed cost is one time cost incurred for setup of plant. The fixed costs (in Rs.) for setup are

	P1	P2	P3	P4	P5
LAND	28,00,00,000	27,00,00,000	27,00,00,000	28,00,00,000	25,00,00,000
ESTBLISHMENT	35,00,00,000	32,00,00,000	32,00,00,000	30,00,00,000	35,00,00,000
REVENUE	42,00,00,000	42,00,00,000	40,00,00,000	38,00,00,000	40,00,00,000
MACHINERY	35,00,00,000	36,00,00,000	37,00,00,000	38,00,00,000	35,00,00,000
DOCUMENTATION	22,00,00,000	22,00,00,000	22,00,00,000	20,00,00,000	20,00,00,000
PLANNING	15,00,00,000	16,00,00,000	15,00,00,000	15,00,00,000	15,00,00,000

The variable cost/unit(in Rs.) for setup of plant are

	P1	P2	P3	P4	P5
LABOUR	620	620	580	600	600
POWER	625	600	600	600	600
RAW MATERIAL	590	600	580	610	600
EMISSION	170	180	165	185	165
TEMP MACHIN	240	230	280	280	250

The transportation cost to any market for a particular plant in per unit per km are

PLANT	TRANSPORTATION COST / unit /km
P1	.2687
P2	.2750
P3	.2668
P4	.3125
P5	.2500

Annual cost = Total fixed costs + annual variable costs + total transportation costs

(Tip: You have to choose one plant location such that the total costs excluding the inspection cost is minimum.)

Dashboard Design (Sales Data)

PrimaPlanta would like a report to track performance for the product 5up and its impact on the existing competitive and geographical landscape. Using the dataset provided in the excel file named "Beverage_Sales Data" create a dashboard for the same.

Hint: Creating dashboard could be a new thing for any team and hence try to ask following questions

Define your Audience

What is the primary objective of this report for the intended audience?

How is your report design different for Board level audience compared to Brand/Field audience report?

Storyboarding

How should you design the flow of the report?

How many sections/dashboards do you need and how would you define each of them?

Reporting Views/Features – How is my drug sales vs. competitor sales over different time periods (YTD/QTD/PTD etc.)?

How is one geography performing compared to other?

Which KPIs can be relevant to measure/track product's performance?

What are top 5-10 area/districts which are contributing the most sales?

What filters should be kept to view data at different levels?

What visualization would be best-suited for representing a specific insight/analysis?

NIT Jamshedpur (Customer Segment)

Not long ago, PrimaPlanta went on to address a seminar at NIT Jamshedpur on "Impact of Digitization in FMCG Industries: Futuristic Viewpoint", the seminar revolved around how technology has made its way sneakily into the FMCG industries, more dominantly in the food and beverages sector. The half-hour break time was going to play an important role in the company's future for the next five years. The webinar team led by one of the executives went on to try the food outlets at NIT Jamshedpur, when their eyes caught the uncountable no. of students gathered at the outlets, the sight is paradise for any business. The idea was obvious, Primaplanta was on to targeting the student community in the near future through food outlets in their colleges.

Our client PRIMAPLANTA has acquired a food retailer which sells different foods like momo, chips, cold drinks etc. PRIMAPLANTA wishes to target a specific group of customers, namely the student community hence it sees potential setting up outlets in college campuses like NIT Jamshedpur. The advanced analytics team of our client gathered insights on students' behaviour and concluded that maggi is the most consumed edible product inside the campus.

Further the consulting firm decides to dwell on the proposition on why they chose the students' channel. For answering the above query, the associates' cohort met and brainstormed on the question, the executive head suggested that the answer be found as follows. Guesstimating the total cash outflow on behalf of the students of NIT Jamshedpur on edible products would suffice the requirement.

Put on your thinking caps and guesstimate the above query.

The internal analytics team of our client gathered insights on students of NIT Jamshedpur and referred to us to forecast the number of customers on a particular day. The interesting part of the thing is that this forecast depends on several factors like competitor's food quality pricing and the most important mess menu. Each of these factors is obviously not independent and will link with other factors to give valuable results. The factors are a mix of both easily quantifiable entities as well as student attributes that are rather hard to put in numbers, be very judicious, logical and sensible of your interpretations.

#To forecast the number of customers for a week by each day 40% weightage is to be given to the mess food as that is the base criteria.

#The rest to be allocated to the attributes set in Consumer Behaviour. Attributes like Spending nature is a qualitative thing while other parameters like winnability, foodie index, personality type etc are already quantified. The main thing is to assign weightage with appropriate assumption. Variance in answer is acceptable.