Packaging Co. is a private equity owned global packaging company looking to maximize revenue and earnings growth before an exit from the business in the next 5 years. Packaging Co. has 5 business units out of which, its 2 North American business units (Plastic packaging and Paper packaging) were recently consolidated under a new leadership.

Sales in the Paper packaging business unit have declined over the last few years as several key customers have transitioned their packaging to plastic. Last year, paper profit margins decreased sharply, despite the introduction of several new production asset. The paper market is consolidating, creating larger competitors (several of which are vertically integrated with paper mills giving them a theoretical cost advantage)

The company was facing the following challenges-

- External market pressures:
  - Pricing pressure causing margin erosion and the loss of several major customers
  - Rising raw material costs compressing margins
  - Industry consolidation resulting in strong competitors
  - Rapidly changing customer preferences
- Internal growth challenges:
  - Inconsistent pricing process & system
  - Aged assets creating high manufacturing cost
  - Customer targeting and prioritization process in early stages of development

The CEO of Packaging Co. engaged Bain to help the Plastic and Paper business units prepare for a sales growth

**Note:** EBITDA stands for the Earnings before Interest, Tax, Depreciation and Amortisation. It is a measure of operating profit of the company.

Q1. Which of the following most accurately describes why Packaging Co. has approached Bain?

- a) To negotiate the deal price for an exit
- b) Evaluate the potential of different opportunities and to define a new integrated strategy focusing on an increase in the sales for the plastic and paper packaging units
- Boosting the EBITDA, sales and the overall sale price to build capabilities that will be critical to deliver the 5 year exit plan
- d) Implemented a cross functional tender management process to improve large account win rate for increasing the sales of the paper packaging unit

Q2. Bain plans to help Packaging Co. increase its sales. Which of the following options will help in designing the MOST SUITABLE solution to address Packaging Co.'s challenges?

- 1. Increase production capacity to generate high volumes
- 2. Cost effective way to acquire new customers through new tendering process
- 3. Optimising product pricing to boost margins
- 4. Restructuring the budgeting mechanism to avoid unnecessary spending
- 5. Optimizing the distribution network
- 6. Procurement rationalization
- 7. Modifying the product combinations
- a) 2.4.5.1
- b) 3,2,7,4
- c) 1,5,4,3
- d) 3,5,1,2

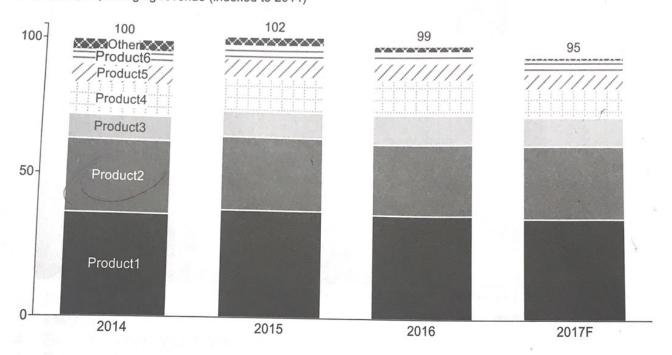
Q3. You have been given the responsibility of undertaking an evaluation of the Packaging Co. plant's commercial and operational performance. For this, there was a requirement of some reports. As an Associate Consultant, which reports would you be requiring?

- Financial reports
- Production report √
- Inventory report
- 4. Sales pipeline report
- Staffing report
- a) 1,2,3,4
- b) 1,3,4,5
- c) 1,2,3,5
- d) All of the above

Bain came up with the following chart based on the internal data obtained from the client:

Revenue for Packaging Co. from its paper-packaging segment

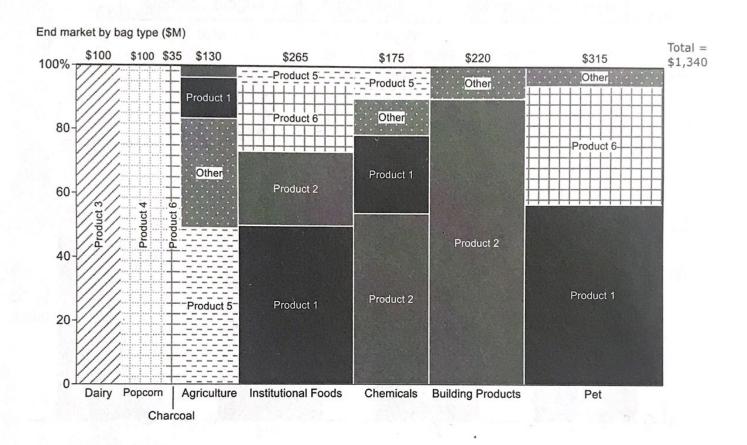
Packaging Co paper packaging revenue (indexed to 2014)



Q4. Based on the chart above, if the total revenue falls by ~4% (annually till 2019) and the revenue for Product 2 is expected to increase at a rate of ~5% (annually till 2019), what will happen to the share of revenue for Product 2 in Packaging Co. in 2019 (relative to 2014)?

- a) Decrease
- b) Increase
- c) Data insufficient
- d) Remain Constant

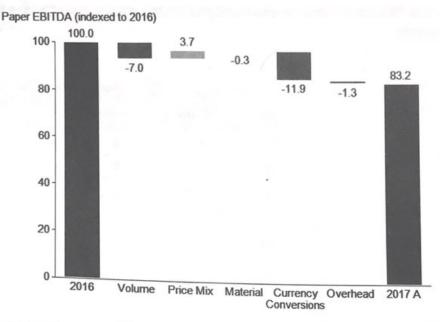
## End market analysis for the products of Packaging Co.



Q5. From the above chart, which of the following products dominate the most attractive end segments?

- a) Product 1 and Product 5
- b) Product 1 and Product 4
- c) Product 2 and Product 6d) Product 1 and Product 2

### EBITDA mix for the paper-packaging segment



Q6. What is the main cause of the EBITDA to decline from 2016-2017? (Based on the chart above)

- 1. Volume losses
- 2. Price Mix
- Material
- 4. Currency conversion efficiency
- 5. Overheads
- a) 1,4
- b) 2,5
- c) 3,4
- d) 2,3

Q7. Bain undertook the following steps as a part of the growth strategy for Packaging Co. You are required to identify the most appropriate sequence of the steps taken-

- 1. Ensure attractive markets align with Packaging Co differentiated capability
- 2. Forecast growth by market segment using underlying economic drivers and expert interviews
- 3. Identify attributes of the most profitable products within those capabilities to focus sales team
- 4. Review historic trends and estimate Packaging Co share gain/loss by sub-markets
- 5. Identify most attractive markets based on growth and expected margins
- a) 1,3,2,4,5
- b) 5,1,2,4,3
- c) 4,2,5,1,3
- d) 5,4,2,3,1

The following table displays the volume share and profitability of Packaging Co. across the different end markets:

	Market (*	14-'17)	Packaging Co ('14-'17)		
End Market	Est. Size (\$M)	Volume	Volume	Profitability 2017	
Pet	\$315	-4.0%	•	1%	
Ins. Foods	\$265	0.7%	•	15%	
Building Products	\$220	3.5%	#	-5%	
Chemicals	\$175	-7.0%	1	-10%	
Agriculture	\$130	-7.0%	•	12%	
Dairy	\$100	1.5%	•	4%	
Popcom	\$100	-1.8%	-	-1%	
Charcoat	\$30	-	•	3%	
Average		-2%			

Q8. On the basis of the table above, what has happened to the overall volume of the market?

- a) Increased
- b) Decreased
- c) No change

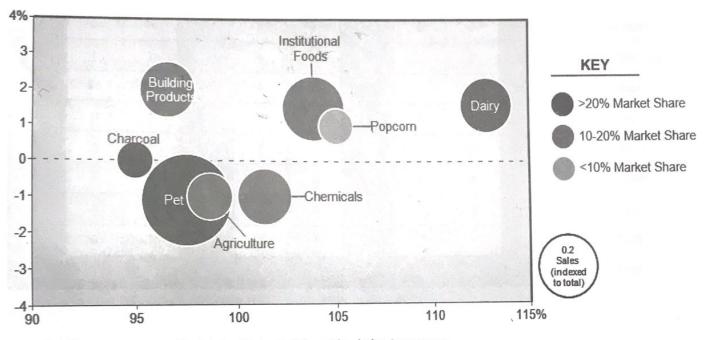
Q9. If 'Building products' and 'Chemicals' businesses are sold off, what would happen to the overall profitability for Packaging Co.?

- a) Increase by 19%
- b) Decrease by 19%
- c) No change
- d) Data insufficient

The following chart shows the forecasted growth and material margins for different end markets along with their market shares:

End market segments growth forecast and margins

### Market forecasted volume growth



Packaging Co material margin - index to average

Q10. Based on the chart above, which combination of end market segments should Packaging Co. target?

- a) Building products and Dairy
- b) Institutional foods and Dairy
- c) Dairy and Popcorn
- d) Institutional Foods and Popcorn

# Manpower headcount by function for Packaging Co.

	Jan 2016	Sept 2016		Jan 2017		Sep 2017				
	Total	+		Total	+	-	Total	+	-	Total
Finance	23	5	3	25	5	1	29	4	0	33
HR	8	2	3	7	1	1	7	2	1	8
Sales	38	7	5	40	4	4	40	7	13	. 34
IT	6	2	0	8	1	0	9	1	0	10
Admin	13	10	1	22	5	1	26	1	1	26
Pricing	6	1	3	4	0	0	4	0	1 1	3
Legal	0	2	0	2	0	0	2	0	0	2
R&D	7	2	1	8	1	0	9	1	0	10
Total	100	31	16	115	17	7	125	16	16	125

Q11. On the basis of the chart above, which function has seen the highest increase in relative terms from January 2017 till September 2017?

- a) Finance
- b) HR
- c) IT
- d) R&D

### CASE STUDY II

Grocery Retail Co. is a premium grocery retailer with presence in major metro cities across India. Its value proposition is focused on specialty premium grocery (e.g. global cuisines, exotic foods, etc.).

The current value proposition is not driving profitable economics – while sales have grown, there is persistent loss of profitability. Customer behaviour is highly skewed towards infrequent one-off purchases – low share of repeat high frequency customers who relied on the store for their regular shopping needs. Current assortment is heavily proliferated with high inventory days and non-moving stock leading to sub-optimal throughput.

Q1. Which of the following factors should Bain analyse first?

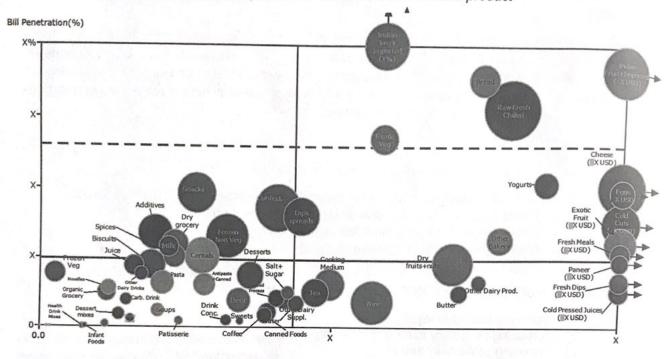
- a) Current value proposition and value proposition of competitors, global players etc.
- b) Contracts for purchase of various SKUs (stock keeping units)
- c) Employee wages to be benchmarked against competitors
- d) Store locations to assess spread and focus

Q2. Which of the following is NOT a priority for the client?

- a) Improving customer loyalty
- b) Increasing frequency to reduce inventory days
- c) Improving profitability and margins
- d) Identifying profitable stores and closing down others

Q3. Which of the following categories (from the chart) is most profitable for Grocery Retail Co.? Note:

- GMROF: Gross margin return on footage
- Bill Penetration: Sales or adoption as a % of total market for the product



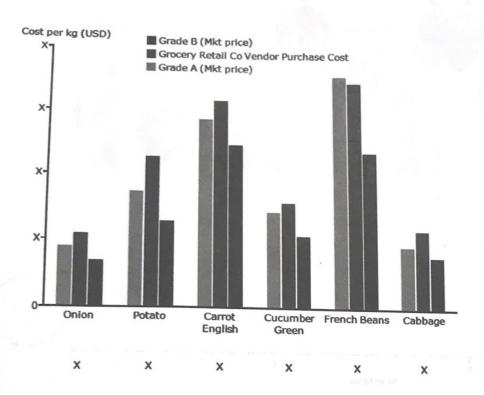
XM GMROF (\$/sq.ft)

- a) Yogurts
- b) Bread
- c) Indian Fruit + Imported
- d) Exotic Veg

Q4. Which of the promotion strategies should Grocery Retail Co. follow to tackle the problem of infrequent use?

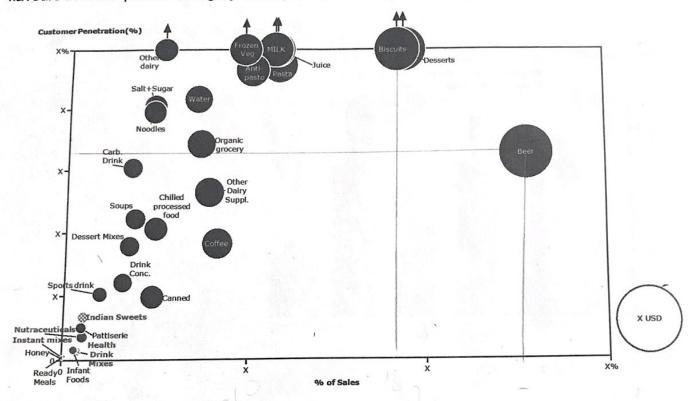
- a) First time purchase discount
- b) Loyalty and repeat purchase discounts
- c) Festive seasons sale
- d) Lucky draw

Q5. Below is the data for buying prices of Grocery Retail Co. v/s competitors. Based on this data the Grocery Retail Co. should:



- a) Renegotiate purchase prices through longer term contracts
- b) Buy higher quality of products
- c) Buy more of Carrot English and less of French beans
- d) Increase overall sales prices

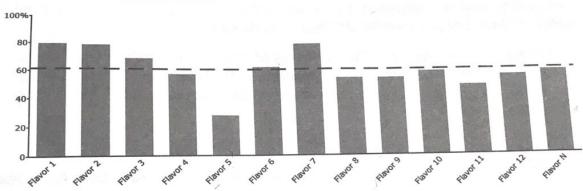
Q6. Based on the data in the chart below, reduction of SKUs (Stock keeping units) and multiple flavours in which product category will improve profitability of Grocery Retail Co.?



- a) Milk
- b) Honey
- c) Biscuits
- d) Beer

Q7. Based on below data, reducing SKUs makes most sense for which flavour (Dotted line represents average)

Percent Of Tail SKU's that account for bottom 25% of sales



- a) Flavor 5
- b) Flavor 7
- c) Flavor 4
- d) Flavor 11

#### **CASE STUDY III**

Client is a multi-national food company with presence in developed and emerging markets globally. Accelerated growth in emerging markets' consumer habits had increased the awareness on the importance of developing a winning strategy to participate in these markets.

Client's global strategy has resulted in different levels of market penetration around the globe, while it has been successfully participating in markets with Americanized consuming habits (typically presenting steady market growth), it has not been as successful in fast growing countries with local and traditional habits.

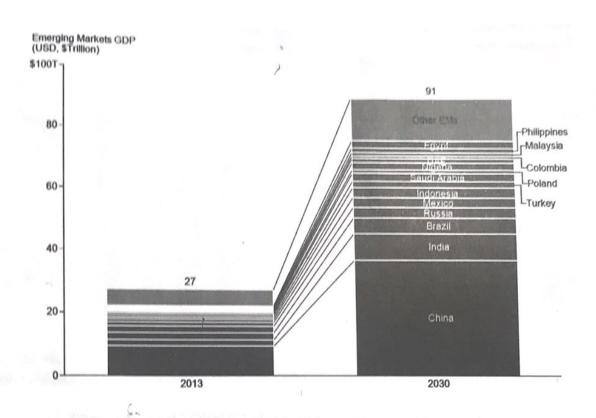
Q1. Which of the following most accurately describes why the client engaged Bain & Company?

- a) Look for possible acquisitions and build a growth strategy around it
- b) Drive cost savings through organization restructuring and transformation
- c) Develop a winning strategy to grow penetration in emerging markets
- d) Optimize and rationalize geographic presence and existing product portfolio
- Q2. Which of the following information will be least useful for Bain in addressing the client's needs?
  - a) Benchmarking metrics and data on its competitors' profitability
  - b) Top emerging markets socioeconomic statistics  $\vee$

C

- c) Packaged foods trends, challenges, and key success factors in emerging markets
- d) Database of the food exporters in the emerging market

Bain conducted an overall analysis of prominent trends in the global emerging markets. Bain identified several emerging markets which are expected to drive emerging markets' GDP growth making their contribution to global GDP close to 50% by the year 2030.



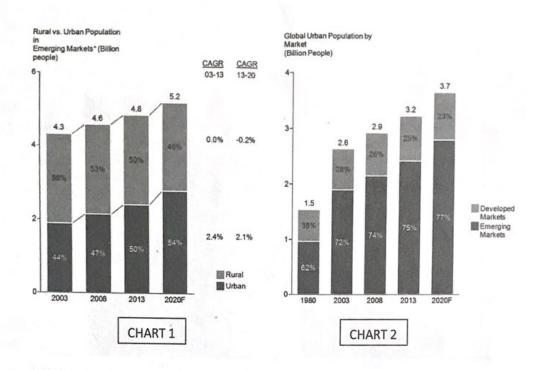
c好像是7%

a

Q3. Which of the following statements can be accurately inferred from the chart above?

- a) Growth is largely driven by a few top countries
- b) Increase in the GDP of the emerging markets is driven mainly by rapid urbanization and industrialization
- c) Cumulative growth rate i.e. compounded annual growth rate of GDP from 2013-2030 is
  ~3%
- d) All the above can be inferred

For the analysis, the following charts were prepared showing the population of emerging markets in comparison to developed markets.



Q4. Based on Chart 1, which of the following statements CANNOT be concluded?

- a) 2003-2013 urban population experienced a greater cumulative growth as compared to 2013-2020
- b) More than half of emerging market's population will be urbanized by 2020
- c) There has been a decrease in the urban population over 2003-2020
- d) The rural population has relatively remained unchanged over 2003-2020

Q5. What is the % split of the emerging and developed market share of the global urban population for 2020 in chart 2, given that the cumulative growth rate (compounded annual growth rate) for the global urban population for the period 2013-2020 is 16%?

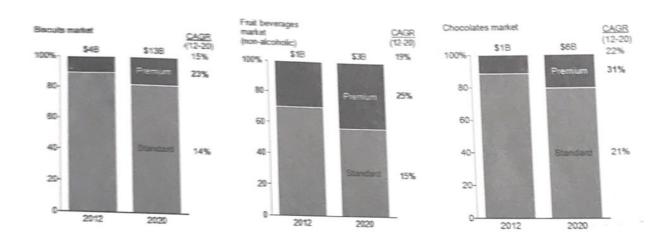
a) 74%, 26%

C

b

- b) 77%, 23%
- c) 54%, 46%
- d) Data insufficient

Finally, Bain conducted an analysis to zoom-in on the factors which drive the success of consumer product companies in the emerging markets. This analysis focused on fruit beverages, chocolates and biscuits markets.



Q6. What will be the total revenue of the biscuit market in emerging markets in 2018, given the overall CAGR is 15% (select the closest value)?

$$CAGR = \left\{ \frac{\text{Ending Value}}{\text{Beginning Value}} \right\}^{\left\{ \frac{1}{\text{Number of Years}} \right\}} - 1$$

a) \$8.0B

d

b

- b) \$10.5B
- c) \$9.0B
- d) \$9.8B

Q7. From the above three charts, which of the following is the most accurate conclusion?

- The market revenue of the standard chocolate product is decreasing due to the increase in demand of premium chocolate
- In all categories, customers have shown a strong support for 'premiumization' of products
- c) The revenue for standard products across the three categories is expected to decrease
- d) Biscuit market has the highest revenue among the three categories and hence has grown the maximum from 2012-20