

Get Started

The Cold Drink Station is a beverage company that sells cold drinks under the brand name 'Zingg'. For the upcoming summer season, they aim to appeal to young customers in India by marketing their brand during the World Cup. The marketing head is very excited about the brand launch, but the finance manager is a bit skeptical and has requested a cost-benefit report for the event. As a data analyst in the marketing department, you have been asked to prepare a comprehensive cost-benefit analysis and present it through a dashboard to the marketing head.

The marketing team has decided to introduce a new bottle for Zingg, featuring World Cup-related images. This initiative will incur additional costs for a new mould and higher packaging expenses. The new bottle will replace the regular Zingg bottles for a six-month period

Details

The company produces Zingg in 1000 ml bottles. Below are the key details:

Pricing

The selling price per bottle is ₹82.

Sales Quantity and Growth

As per the old plan, 725,000 units were expected to be sold in March, with a projected 5% increase in sales for each subsequent month.

As per the new plan, 800,000 units were expected to be sold in March, with a projected 10% increase in sales for each subsequent month.

Raw Material Details

To produce this cold drink, the following raw materials are required:

Water- 85%

Sugar Syrup- 10%

Flavoring - 2%

Carbonated Water- 2%

Preservatives- 0.50%

Coloring Agents- 0.50%

The price of raw material per litre in Rs. is provided as below:

Water-	10
Sugar Syrup-	70
Flavoring-	300
Carbonated Water-	20
Preservatives-	400
Coloring Agents-	500

Bottling and Processing Costs

As per the old plan, bottling cost per unit is ₹2.

As per the new plan, bottling cost per unit is ₹3.

As per the old plan and new plan, processing cost per unit will be ₹6.

Fixed Costs Old

The factory expenses include a monthly rent of ₹150,000 and cold storage costs of ₹75,000.

The marketing budget starts at ₹80,000 for the first month, with a planned 10% increase each following month.

New Ad Plan

The company will launch the advertising campaign in March and continue it until August.

As per the new plan, Ads preparation cost will be 10,000,000 ,New Bottling Mould will cost 95,000

Incremental Advertising cost will be 23,000,000, which will be divided equally in the campaign period.

Objective

To conduct a cost-benefit analysis of the new marketing campaign and come out with insights and recommendations for the same.

Quantity			
Item	Bottle (in ml)	Existing Price (in Rs. per Bottle)	New Price (in Rs. per Bottle)
Zingg	1000	82	82
Material Details of each Bottle			
Item	Price/litre in Rs.	Material %	
Water	10	85%	
Sugar Syrup	70	10%	
Flavoring	300	2%	
Carbonated Water	20	2%	
Preservatives	400	0.50%	
Coloring Agents	500	0.50%	
	Existing Bottle	New Bottle	
Bottling Cost (in Rs.)	2	3	
Processing Cost (in Rs.)	6	6	
Sales Quantity and Growth	March Sales (in units)	Month on Month Growth%	
Old Plan	725000	5%	
New Plan	800000	10%	
Factory Expenses (in Rs.)			
Factory Rent	150000		
Cold Storage Cost	75000		
Marketing Expenses (in Rs.)	March Budget	Month on Month Growth%	
Old Marketing Budget	800000	10%	
Incremental Marketing Cost (in Rs.)	1st Month		

Ads Preparation	10,000,000		
New Bottling Mould	95,000		
Incremental Advertising	3,833,333		

	March	April	May	June	July	August
Sales Units (in '000')						
Old Plan	725	762	801	842	885	930
New Plan	800	880	968	1065	1172	1290
Price per Unit (in Rs.)						
Old Plan	82	82	82	82	82	82
New Plan	82	82	82	82	82	82

	March	April	May	June	July	August
Per Unit Material Consumption (in ml)						
Water	850	850	850	850	850	850
Sugar Syrup	100	100	100	100	100	100
Flavoring	20	20	20	20	20	20
Carbonated Water	20	20	20	20	20	20
Preservatives	5	5	5	5	5	5
Coloring Agents	5	5	5	5	5	5
Sales Units ('000')						
Old Plan	725	762	801	842	885	930
New Plan	800	880	968	1065	1172	1290
Raw Material Consumed (in thousand litres)						
Old Plan						
Water	616.25	647.7	680.85	715.7	752.25	790.5
Sugar Syrup	72.5	76.2	80.1	84.2	88.5	93
Flavoring	14.5	15.24	16.02	16.84	17.7	18.6
Carbonated Water	14.5	15.24	16.02	16.84	17.7	18.6
Preservatives	3.625	3.81	4.005	4.21	4.425	4.65
Coloring Agents	3.625	3.81	4.005	4.21	4.425	4.65
Raw Material Consumed (in thousand litres)						
New Plan						
Water	680	748	822.8	905.25	996.2	1096.5
Sugar Syrup	80	88	96.8	106.5	117.2	129
Flavoring	16	17.6	19.36	21.3	23.44	25.8

Carbonated Water	16	17.6	19.36	21.3	23.44	25.8
Preservatives	4	4.4	4.84	5.325	5.86	6.45
Coloring Agents	4	4.4	4.84	5.325	5.86	6.45

Cost (in Rs. '000')	March	April	May	June	July	August
Raw Material Consumed (in thousand litres)						
Old Plan						
Water	6,163	6,477	6,809	7,157	7,523	7,905
Sugar Syrup	5,075	5,334	5,607	5,894	6,195	6,510
Flavoring	4,350	4,572	4,806	5,052	5,310	5,580
Carbonated Water	290	305	320	337	354	372
Preservatives	1,450	1,524	1,602	1,684	1,770	1,860
Coloring Agents	1,813	1,905	2,003	2,105	2,213	2,325
Total	19,140	20,117	21,146	22,229	23,364	24,552
Cost per Unit (in Rs.)	26	26	26	26	26	26
Raw Material Consumed (in thousand litres)						
New Plan						
Water	6,800	7,480	8,228	9,053	9,962	10,965
Sugar Syrup	5,600	6,160	6,776	7,455	8,204	9,030
Flavoring	4,800	5,280	5,808	6,390	7,032	7,740
Carbonated Water	320	352	387	426	469	516
Preservatives	1,600	1,760	1,936	2,130	2,344	2,580
Coloring Agents	2,000	2,200	2,420	2,663	2,930	3,225
Total	21,120	23,232	25,555	28,116	30,941	34,056
Cost per Unit (in Rs.)	26	26	26	26	26	26

Amount (in Rs. '000')	March	April	May	June	July	August
Sales						
Old Plan	59,450	62,484	65,682	69,044	72,570	76,260
Total Sales	59,450	62,484	65,682	69,044	72,570	76,260
Variable Cost						
Material Cost	19,140	20,117	21,146	22,229	23,364	24,552
Bottling Cost	1,450	1,524	1,602	1,684	1,770	1,860
Processing Cost	4,350	4,572	4,806	5,052	5,310	5,580
Total Variable Cost	24,940	26,213	27,554	28,965	30,444	31,992
Contribution (Sales Cost - Variable Cost)	34,510	36,271	38,128	40,079	42,126	44,268
Contribution per Unit (in Rs.)	48	48	48	48	48	48

Amount (in Rs. '000')	March	April	May	June	July	August
Sales						
Old Plan	65,600	72,160	79,376	87,330	96,104	105,780
Total Sales	65,600	72,160	79,376	87,330	96,104	105,780
Variable Cost						
Material Cost	21,120	23,232	25,555	28,116	30,941	34,056
Bottling Cost	2,400	2,640	2,904	3,195	3,516	3,870
Processing Cost	4,800	5,280	5,808	6,390	7,032	7,740
Total Variable Cost	28,320	31,152	34,267	37,701	41,489	45,666
Contribution (Sales Cost - Variable Cost)	37,280	41,008	45,109	49,629	54,615	60,114
Contribution per Unit (in Rs.)	46.60	46.60	46.60	46.60	46.60	46.60

Amount (in Rs. '000')	March	April	May	June	July	August
Contribution						
Old Plan	34,510	36,271	38,128	40,079	42,126	44,268
New Plan	37,280	41,008	45,109	49,629	54,615	60,114
Incremental Contribution	2,770	4,737	6,981	9,550	12,489	15,846
Incremental Expense						
Ads Preparation	10,000	0	0	0	0	0
New Bottling Mould	95	0	0	0	0	0
Incremental Advertising	3,833	3,833	3,833	3,833	3,833	3,833
Total	13,928	3,833	3,833	3,833	3,833	3,833
Incremental Profits	-11,158	903	3,148	5,716	8,656	12,013

Cost Benefit Analysis

Total Incremental Contribution

52,373

Incremental Units Sold (in %)

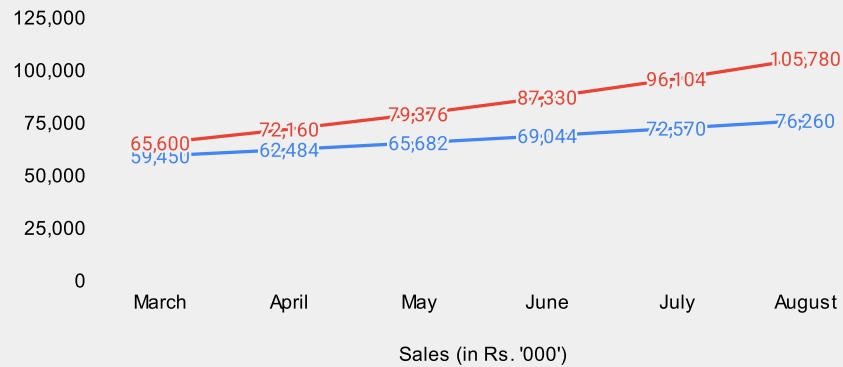
24.87%

Total Incremental Profits

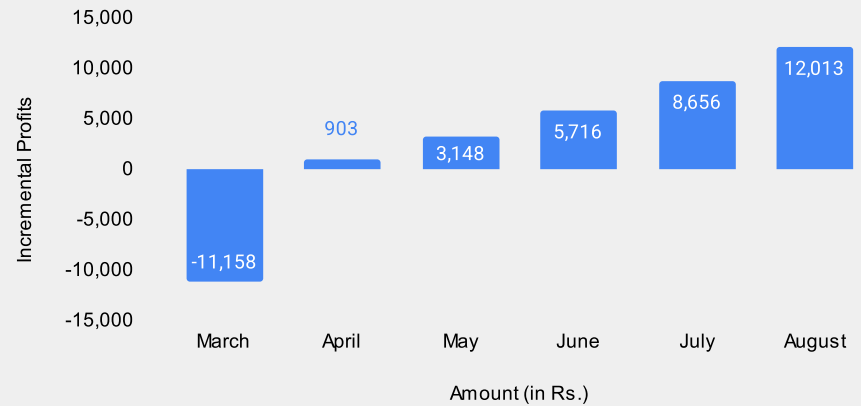
19,278

Sales

— Old Plan — New Plan



Month-wise Incremental Profits



Total Incremental Profits (in '000' Rs.)	19,278
Total Incremental Contribution (in Rs. '000')	52,373
Incremental Units Calculation (in '000' units)	
Units sold as per Old Plan	4945
Units Sold as per New Plan	6175
Increment Units	1230
%Increase in units sold	24.87%

Sales (in Rs. '000')	March	April	May	June	July	August
Old Plan	59,450	62,484	65,682	69,044	72,570	76,260
New Plan	65,600	72,160	79,376	87,330	96,104	105,780

Amount (in Rs.)	March	April	May	June	July	August
Incremental Profits	-11,158	903	3,148	5,716	8,656	12,013

Report for Management

1	In a new plan a forecast is that the sales quantity will be 24.87% higher than the old plan forecast.
2	Cost-Benefit analysis of new plan shows that it will generate an incremental profit of Rs. 19,278,000