

Stanford Bottling Inc. (B)

Capacity Plans

Phil: I wore out my cell phone trying to find more capacity, and finally was directed to Phil Gronik, who runs Ace Bottling in Fremont. He handles overflow orders for the Coca Cola bottlers on the peninsula, but because he isn't guaranteed a steady flow of business, his contract with Coke is non-exclusive. He is willing to lease us some bottling capacity for next year, but the price is steep; he wants \$400,000 for a nine-month lease. Unfortunately, he already was fully booked for our first quarter, but we could move in and be up to speed for Q2. On the plus side, the deal does include all the infrastructure we need, everything except materials and direct labor. I think we could bottle an additional 12,000 pallets per quarter in his facility.

Based on his analysis of the scenarios embedded in Mark Benson's budget forecast for SBI's 2005 fiscal year (see Stanford Bottling A), Philip Abrams asked Benson to investigate the possibility of acquiring additional bottling capacity on a temporary basis. Given the wide range of uncertainty in demand, Abrams felt that making a permanent investment in capacity could not be justified, but he felt that SBI might be willing to lease space if the price was right. He returned to Benson's memo:

I pushed the numbers through the spreadsheet I gave you earlier, and leasing from Gronik looks like a losing proposition to me, but I told him I would run the offer by you and get back to him.

Based on your email, I also asked him how long he would wait for us to decide. I could tell that wasn't a question he wanted to hear. He said we could have two weeks to decide, but after that holding the capacity for us might begin to cost him money if he had to turn down other offers. Luckily the problem is financial rather than operational; cleaning the tanks and other changeover tasks can be completed in a couple of days. I told him that you wanted to wait until as late in the first quarter as possible to commit, and he said he would think about some sort of "cancellation fee" if we back out, but he has never been involved in a deal like that before. I don't have any experience with that kind of arrangement either, so I was hoping you could propose a number for me to take back to him.

My spreadsheet with the costs and benefits of the additional capacity is attached (Exhibit B). Compared to my earlier budget (Exhibit A), the expansion reduces next years NIBT by about \$70,000.

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Exhibit A

	A	B	C	D	E	F	G
1	Expansion?		Expand = No				
2	Size (Pallets)	12,000	D-Mart Quarterly Growth 2.00%				
3	Cost	\$400,000					
4	Decide: 1=Yes, 0=No	0					
5	Decision Cutoff	17,000					
6							
7	Stanford Bottling Co.						
8	Operations		Bottling Capacity per qtr.	Quarter 1	26,000	Pallets	
9				Quarter 2	26,000	Pallets	
10				Quarter 3	26,000	Pallets	
11				Quarter 4	26,000	Pallets	
12							
13	DiscountMart Account		Expected Kraka Cola Demand, Pallets/Quarter		Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
14	Quarter 1		15,000		\$52.00	\$780,000	
15	Quarter 2		15,300		\$52.00	\$795,600	
16	Quarter 3		15,606		\$52.00	\$811,512	
17	Quarter 4		15,918		\$52.00	\$827,742	
18	Discount Mart Total		61,824				\$3,214,854
19							
20	Convenience Store Accounts						
21	Quarter	Beverage	Expected Beverage Demand, Pallets/Quarter	Available Bottling Capacity (Pallets)	Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
22	Quarter 1	Dr. 7	4,100	11,000	\$57.00	\$233,700	
23		Kraka Cola	4,300	6,900	\$56.50	\$242,950	
24		Rooty Beer	4,700	2,600	\$54.50	\$141,700	
25	Quarter 2	Dr. 7	4,100	10,700	\$56.50	\$231,650	
26		Kraka Cola	4,300	6,600	\$56.00	\$240,800	
27		Rooty Beer	4,700	2,300	\$54.00	\$124,200	
28	Quarter 3	Dr. 7	3,700	10,394	\$55.50	\$205,350	
29		Kraka Cola	4,300	6,694	\$55.00	\$236,500	
30		Rooty Beer	4,200	2,394	\$54.50	\$130,473	
31	Quarter 4	Dr. 7	4,300	10,082	\$55.00	\$236,500	
32		Kraka Cola	4,300	5,782	\$54.00	\$232,200	
33		Rooty Beer	3,400	1,482	\$52.00	\$77,058	
34	Conv. Store Total		50,400				\$2,333,081
35	Annual Bottling Contribution						\$5,547,935
36							
37	Stanford Bottling Co. 2005 Budget						
38	Contribution 						

Stanford Bottling Inc. (B)

Exhibit B

	A	B	C	D	E	F	G
54	Expansion?		Expand = Yes				
55	Size (Pallets)	12,000	D-Mart Quarterly Growth 2.00%				
56	Cost	\$400,000					
57	Decide: 1=Yes, 0=No	1					
58	Decision Cutoff	17,000					
59							
60	Stanford Bottling Co.						
61	Operations		Bottling Capacity per qtr.	Quarter 1	26,000	Pallets	
62				Quarter 2	38,000	Pallets	
63				Quarter 3	38,000	Pallets	
64				Quarter 4	38,000	Pallets	
65							
66	DiscountMart Account		Expected Kraka Cola Demand, Pallets/Quarter		Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
67	Quarter 1		15,000		\$52.00	\$780,000	
68	Quarter 2		15,300		\$52.00	\$795,600	
69	Quarter 3		15,606		\$52.00	\$811,512	
70	Quarter 4		15,918		\$52.00	\$827,742	
71	Discount Mart Total		61,824				\$3,214,854
72							
73	Convenience Store Accounts						
74	Quarter	Beverage	Expected Beverage Demand, Pallets/Quarter	Available Bottling Capacity (Pallets)	Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
75	Quarter 1	Dr. 7	4,100	11,000	\$57.00	\$233,700	
76		Kraka Cola	4,300	6,900	\$56.50	\$242,950	
77		Rooty Beer	4,700	2,600	\$54.50	\$141,700	
78	Quarter 2	Dr. 7	4,100	22,700	\$56.50	\$231,650	
79		Kraka Cola	4,300	18,600	\$56.00	\$240,800	
80		Rooty Beer	4,700	14,300	\$54.00	\$253,800	
81	Quarter 3	Dr. 7	3,700	22,394	\$55.50	\$205,350	
82		Kraka Cola	4,300	18,694	\$55.00	\$236,500	
83		Rooty Beer	4,200	14,394	\$54.50	\$228,900	
84	Quarter 4	Dr. 7	4,300	22,082	\$55.00	\$236,500	
85		Kraka Cola	4,300	17,782	\$54.00	\$232,200	
86		Rooty Beer	3,400	13,482	\$52.00	\$176,800	
87	Conv. Store Total		50,400				\$2,660,850
88	Annual Bottling Contribution						\$5,875,704
89							
90	Stanford Bottling Co. 2005 Budget						
91	Contribution 						

Exhibit C: Formulas

	A	B	C	D	E	F	G
1	Expansion?		Expand = No				
2	Size (Pallets)	12000	D-Mart Quarterly Growth				
3	Cost	400000	0.02				
4	Decide: 1=Yes, 0=No	0					
5	Decision Cutoff	17000					
6							
7	Stanford Bottling Co.						
8	Operations		Bottling Capacity per qtr.	Quarter 1	26000	Pallets	
9				Quarter 2	=E8+(B4*B2)	Pallets	
10				Quarter 3	=E8+(B4*B2)	Pallets	
11				Quarter 4	=E8+(B4*B2)	Pallets	
12							
13	DiscountMart Account		Expected Kraka Cola Demand, Pallets/Quarter		Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
14	Quarter 1		15000		52	=MIN(C14,E8)*E14	
15	Quarter 2		=(1+\$C\$3)*C14		52	=MIN(C15,E9)*E15	
16	Quarter 3		=(1+\$C\$3)*C15		52	=MIN(C16,E10)*E16	
17	Quarter 4		=(1+\$C\$3)*C16		52	=MIN(C17,E11)*E17	
18	Discount Mart Total		=SUM(C14:C17)				=SUM(F14:F17)
19							
20	Convenience Store Account						
21	Quarter	Beverage	Expected Beverage Demand, Pallets/Quarter	Available Bottling Capacity (Pallets)	Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
22	Quarter 1	Dr. 7	4100	=MAX(0,E8-C14)	57	=MIN(C22,D22)*E22	
23		Kraka Cola	4300	=MAX(0,D22-C22)	56.5	=MIN(C23,D23)*E23	
24		Rooty Beer	4700	=MAX(0,D23-C23)	54.5	=MIN(C24,D24)*E24	
25	Quarter 2	Dr. 7	4100	=MAX(0,E9-C15)	56.5	=MIN(C25,D25)*E25	
26		Kraka Cola	4300	=MAX(0,D25-C25)	56	=MIN(C26,D26)*E26	
27		Rooty Beer	4700	=MAX(0,D26-C26)	54	=MIN(C27,D27)*E27	
28	Quarter 3	Dr. 7	3700	=MAX(0,E10-C16)	55.5	=MIN(C28,D28)*E28	
29		Kraka Cola	4300	=MAX(0,D28-C28)	55	=MIN(C29,D29)*E29	
30		Rooty Beer	4200	=MAX(0,D29-C29)	54.5	=MIN(C30,D30)*E30	
31	Quarter 4	Dr. 7	4300	=MAX(0,E11-C17)	55	=MIN(C31,D31)*E31	
32		Kraka Cola	4300	=MAX(0,D31-C31)	54	=MIN(C32,D32)*E32	
33		Rooty Beer	3400	=MAX(0,D32-C32)	52	=MIN(C33,D33)*E33	
34	Conv. Store Total		=SUM(C22:C33)				=SUM(F22:F33)
35	Annual Bottling Contribution						=G18+G34
36							
37							
38		Contribution	Bottled Drink Contribution	=G35			
39			Other	554000			
40			Total Contribution			=SUM(D38:D39)	
41		Expenses (Fixed)	Production Salaries	1136000			
42			Bottling Plant Expenses	818000			
43			Transportation	770000			
44			Expansion Lease	=B4*B3			
45			Miscellaneous	104000			
46			Total Bottling Expenses		=SUM(D41:D45)		
47			Advertising	1030000			
48			General & Admin.	944000			
49			Depreciation	742000			
50			Interest Expense	290000			
51			Total Expenses		=SUM(D47:D50)	=E46+E51	
52			PreTax Income			=F40-F51	

Exhibit C Continued: Formulas

	A	B	C	D	E	F	G
54	Expansion?		Expand = Yes				
55	Size (Pallets)	=B2	D-Mart Quarterly Growth				
56	Cost	=B3	0.02				
57	Decide: 1=Yes, 0=No	1					
58	Decision Cutoff	=B5					
59							
60	Stanford Bottling Co.						
61	Operations		Bottling Capacity per qtr.	Quarter 1	26000	Pallets	
62				Quarter 2	=E61+(B57*B55)	Pallets	
63				Quarter 3	=E61+(B57*B55)	Pallets	
64				Quarter 4	=E61+(B57*B55)	Pallets	
65							
66	DiscountMart Account		Expected Kraka Cola Demand, Pallets/Quarter		Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
67	Quarter 1		=C14		52	=MIN(C67,E61)*E67	
68	Quarter 2		=C15		52	=MIN(C68,E62)*E68	
69	Quarter 3		=C16		52	=MIN(C69,E63)*E69	
70	Quarter 4		=C17		52	=MIN(C70,E64)*E70	
71	Discount Mart Total		=SUM(C67:C70)				=SUM(F67:F70)
72							
73	Convenience Store Account						
74	Quarter	Beverage	Expected Beverage Demand, Pallets/Quarter	Available Bottling Capacity (Pallets)	Contribution Margin per Pallet	Contribution per Quarter	Total Annual Contribution
75	Quarter 1	Dr. 7	=C22	=MAX(0,E61-C67)	57	=MIN(C75,D75)*E75	
76		Kraka Cola	=C23	=MAX(0,D75-C75)	56.5	=MIN(C76,D76)*E76	
77		Rooty Beer	=C24	=MAX(0,D76-C76)	54.5	=MIN(C77,D77)*E77	
78	Quarter 2	Dr. 7	=C25	=MAX(0,E62-C68)	56.5	=MIN(C78,D78)*E78	
79		Kraka Cola	=C26	=MAX(0,D78-C78)	56	=MIN(C79,D79)*E79	
80		Rooty Beer	=C27	=MAX(0,D79-C79)	54	=MIN(C80,D80)*E80	
81	Quarter 3	Dr. 7	=C28	=MAX(0,E63-C69)	55.5	=MIN(C81,D81)*E81	
82		Kraka Cola	=C29	=MAX(0,D81-C81)	55	=MIN(C82,D82)*E82	
83		Rooty Beer	=C30	=MAX(0,D82-C82)	54.5	=MIN(C83,D83)*E83	
84	Quarter 4	Dr. 7	=C31	=MAX(0,E64-C70)	55	=MIN(C84,D84)*E84	
85		Kraka Cola	=C32	=MAX(0,D84-C84)	54	=MIN(C85,D85)*E85	
86		Rooty Beer	=C33	=MAX(0,D85-C85)	52	=MIN(C86,D86)*E86	
87	Conv. Store Total		=SUM(C75:C86)				=SUM(F75:F86)
88	Annual Bottling Contribution						=G71+G87
89							
90							
91		Contribution	Bottled Drink Contribution	=G88			
92			Other	554000			
93			Total Contribution			=SUM(D91:D92)	
94		Expenses (Fixed)	Production Salaries	1136000			
95			Bottling Plant Expenses	818000			
96			Transportation	770000			
97			Expansion Lease	=B57*B56			
98			Miscellaneous	104000			
99			Total Bottling Expenses		=SUM(D94:D98)		
100			Advertising	1030000			
101			General & Admin.	944000			
102			Depreciation	742000			
103			Interest Expense	290000			
104			Total Expenses		=SUM(D100:D103)	=E99+E104	
105			PreTax Income			=F93-F104	

Exhibit D

Uncertainty About Pallet Sales Per Quarter						
			Minimum	Maximum	Most Likely	Distribution
Discount Mart Quarter 1	Kraka Cola		6,000	24,000		Uniform
Convenience Stores						
Quarter 1	Dr. 7		3,400	4,800		Uniform
	Kraka Cola		3,800	4,800	4,300	Triangular
	Rooty Beer		3,900	5,500	4,700	Triangular
Quarter 2	Dr. 7		3,400	4,800		Uniform
	Kraka Cola		3,800	4,800	4,300	Triangular
	Rooty Beer		3,900	5,500	4,700	Triangular
Quarter 3	Dr. 7		3,300	4,100		Uniform
	Kraka Cola		3,800	4,800	4,300	Triangular
	Rooty Beer		3,200	5,200		Uniform
Quarter 4	Dr. 7		3,800	4,800		Uniform
	Kraka Cola		3,800	4,800	4,300	Triangular
	Rooty Beer		3,100	3,700		Uniform