

316 NS Calculating Bids

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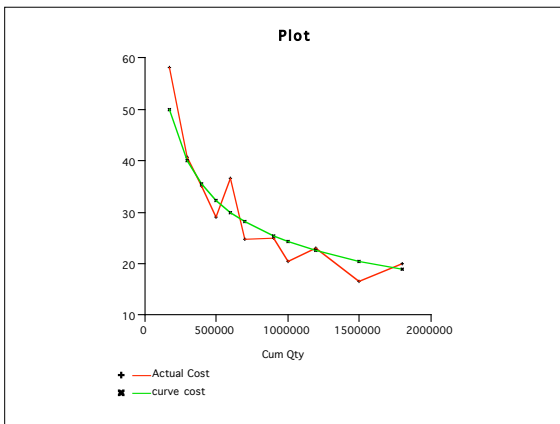
- You want to bid on a 50,000 unit private label contract and you want to bid below your cost of production to improve the odds of winning.

Needs

- We **Need Accurate Forecasts of the Costs** of Making Each Pair of Shoes
- Assume your boss is not interested in risking the forecasted gross profit margin on your low ball bidding strategy

Planning Conditions

- If we win the bid we make the same gross profit margin as if we did not bid at all!
- If we win the bid we are down the LEARNING CURVE AHEAD OF OUR OPPONENTS



Learning Curve

- Sales and Production History
- Period 1 sold 102,000 pairs
- Period 2 sold 198,000 pairs
- Period 3 sold 230,000 pairs
- Period 4 sold 323,000 pairs
- Period 5 **Forecasted Sales**

period	Unit Sales (all three markets)	Cumulative Sales	Unit Cost
1	102,000	102,000	
2	198,000	300,000	\$40
3	230,000	530,000	\$31.59
4	323,000	853,000	\$25.92
5	??Forecast??		

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5	400,000	1,253,000	????

Need the learning curve

period	Cumulative Sales = Q	$V = 7500 Q^{-0.415}$	V=Unit Cost
1	102,000	$7500 (102,000^{-0.415})$	
2	300,000	$7500 (300,000^{-0.415})$	\$40
3	530,000	$7500 (530,000^{-0.415})$	\$31.59
4	853,000	$7500 (853,000^{-0.415})$	\$25.92
5	1,253,000	$7500 (1,253,000^{-0.415})$	\$22.10

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Calculating a Low Bid Benchmark

50,000 unit contract is up for bid

- Bidding below cost on the private label contracts is considered too risky by many managers
- “I’ll let you bid on the contract as long as I get the gross profit contribution that is forecasted without the bid!”

Boss wants to maintain the forecasted gross profit contribution

- Total Forecasted Sales Volume in all three markets = 400,000 units
- Total Forecasted Revenue in all three markets = \$34,000,000
- Forecasted Variable Cost per Unit (learning curve) = \$22.10
- CoGS = \$22.10 x 400,000 = \$8,840,000
- **You want to bid** below cost of production on the 50,000 units in the private label contract

- First step: build a forecasted operating statement as if you did not bid.
- Second step: build a forecasted operating statement as if you had won the bid
- Both must have the same gross profit contribution

Maintain Forecasted Gross Profit

Forecasted Quantity sold (no bid)	400,000
Forecasted Revenue	\$34,000,000
Forecasted variable cost per unit 7500 (1,253,000 ^{-0.415})	\$22.10
Forecasted CoGS	\$8,840,000
Forecasted Gross Profit Contribution	\$25,160,000

Changes if you win bid

Forecasted Quantity sold + 50,000	450,000
Forecasted Revenue in three markets	\$34,000,000
Forecasted variable cost per unit 7500 (1,303,000 ^{-0.415})	\$21.75
Forecasted CoGS $21.75 \times 450,000 =$	\$9,787,500
Forecasted Gross Profit Contribution	\$25,160,000

To Keep the same Gross You Need New Revenues

Forecasted Quantity sold + 50,000	450,000
Revenue Needed $25,160,000 + 9,787,500 = \$34,947,500$	\$34,947,500
Forecasted variable cost per unit 7500 (1,303,000 ^{-0.415})	\$21.75
Forecasted CoGS $21.75 \times 450,000 =$	\$9,787,500
Forecasted Gross Profit Contribution	\$25,160,000

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Gross You	
Revenues	
Revenue Needed	\$34,947,500
Forecasted variable cost per unit 7500 (1,303,000 ÷ 415)	\$21.75
Forecasted CoGS 21.75 x 450,000 =	\$9,787,500
Forecasted Gross Profit Contribution	\$25,160,000

Revenue needed from bidding
 $\$34,947,500 - \$34,000,000 =$
 $\$947,500$

	Place no bid	Win the bid
Forecasted Three Market Revenue	\$34,000,000	\$34,000,000
Bid Revenue \$18.95 x 50,000		\$947,500
Total Revenue	\$34,000,000	\$34,947,500
Cost of Goods Sold	\$8,840,000	\$9,787,500
Gross Profit Contribution	\$25,160,000	\$25,160,000

We will bid below cost

- NEW Revenue needed from contract
- $\$34,947,500 - \$34,000,000 = \$947,500$
- Contract is 50,000 Units
- Bid price to maintain forecasted gross should be
 $947,500 \div 50,000 = \$18.95$ per unit

Actual Cost per unit will \$21.75
A loss of \$2.80 per unit

- If you do not bid your forecasted gross profit contribution is \$25,160,000
- If you win the bid your forecasted gross profit margin remains \$25,160,000
- Your boss is happy and your costs per unit will be lower than the competitors in the future.

Any Questions?

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