Baldwin bicycle company case study essay sample

1. Based on the income statement for 1992 and the information in item 5 of exhibit 2 that the company sold 98, 791 bicycles for 1992, how much was the average per unit sales price, average per unit cost of sales, and average gross margin per bicycle

2. If the yearly fixed manufacturing overhead costs of Baldwin are $1, 500, 000, and the total cost of sales are as listed in the 1982 income statement, what is the amount of total manufacturing costs that are variable?

3. What are the variable manufacturing costs per unit for the standard Baldwin bicycle?

4. What is the per unit contribution margin (sales price -variable costs) of the standard Baldwin bicycle. Assume that $5 per unit of selling costs are variable?

5. What is the current breakeven point (pre-tax) for Baldwin Bicycles given its existing cost structure assuming that $1. 5 million of manufacturing overhead is fixed and all selling and general and administrative costs are fixed (except for the $5 per unit of selling costs that are variable?

6. Based on the average per unit costs of the Challenger, as discussed in Exhibit 2, Item 1 and the fact that the accountant says that about 40% of the overhead costs of the new brand would be variable, how much are the per unit variable manufacturing costs of the new bike?

7. What is the contribution margin per unit (sales price less per unit variable costs) of the new bikes?

8. Exclusive of the costs associated with the additional working capital requirements of the new arrangement, how much would this contract add to the company's bottom line –before taxes assuming sales of 25, 000 units less the 3, 000 of existing sales that would be cannibalized?

9. What would be the net profits (loss) of the company before taxes, assuming only the Challenger bicycle were sold, i. e., the company did not sell any of its regular bicycle but sold a total of 125, 000 bikes per year and selling and administrative costs remained the same in total?

THE BALDWIN BICYCLE COMPANY CASE

In May 1983, Suzanne Leister, marketing vice president of Baldwin Bicycle Company, was mulling over the discussion she had had the previous day with Karl Knott, a buyer from Hi-Valu Stores, Inc. Hi-Valu operated a chain of discount department stores in the Northwest. Hi-Valu's sales volume had grown to the extent that it was beginning to add " house-brand" (also called " private-label") merchandise to the product lines of several of its departments. Mr. Knott, Hi-Valu's buyer for sporting goods, had approached Ms. Leister about the possibility of Baldwin's producing bicycles for Hi-Valu. The bicycles would bear the name " Challenger," which Hi-Valu planned to use for all of its house-brand sporting goods.

Baldwin had been making bicycles for almost 40 years. In 1983, the company's line included 10 models, ranging from it small beginner's model with training wheels to a deluxe 12-speed adult's model. Sales were currently at an annual rate of about $10 million. The company's 1982 financial statements appear in Exhibit 1. Most of Baldwin's sales were

through independently owned retailers (toy stores, hardware stores, sporting goods stores) and bicycle shops. Baldwin had never before distributed its products through department store chains of any type. Ms. Leister felt that Baldwin bicycles had the image of being above average in quality and price, but not a “ top-of-the-line” product.

Hi-Valu’s proposal to Baldwin had features that made it quite different from Baldwin’s normal way of doing business. First, it was very important to Hi-Valu to have ready access to a large inventory of bicycles, because Hi-Valu had had great difficulty in predicting bicycle sales, both by store and by month. Hi-Valu wanted to carry these inventories in its regional warehouses, but did not want title on a bicycle to pass from Baldwin to Hi-Valu until the bicycle was shipped from one of its regional warehouses to a specific Hi-Valu store. At that point, Hi-Valu would regard the bicycle as having been purchased from Baldwin, and would pay for it within 30 days. However, Hi-Valu would agree to take title to any bicycle that had been in one of its warehouses for four months, again paying for it within 30 days. Mr. Knott estimated that on average, a bike would remain in a Hi-Valu regional warehouse for two months.

Second, Hi-Valu wanted to sell its Challenger bicycles at lower prices than the name-brand bicycles it carried, and yet still earn approximately the same dollar gross margin on each bicycle sold–the rationale being that Challenger bike sales would take away from the sales of the name-brand bikes. Thus, Hi-Valu wanted to purchase bikes from Baldwin at lower prices than the wholesale prices of comparable bikes sold through Baldwin’s usual channels.

Finally, Hi-Valu wanted the Challenger bike to be somewhat different in appearance from Baldwin's other bikes. While the frame and mechanical components could be the same as used on current Baldwin models, the fenders, seats, and handlebars would need to be somewhat different, and the tires would have to have the name Challenger molded into their sidewalls. Also, the bicycles would have to be packed in boxes printed with the High-Valu and Challenger names. These requirements were expected by Ms. Leister to increase Baldwin's purchasing, inventorying, and production costs over and above the added costs that would be incurred for a comparable increase in volume for Baldwin's regular products.

On the positive side, Ms. Leister was acutely aware that the bicycle boom had flattened out, and this plus a poor economy had caused Baldwin's sales volume to fall the past two years.* As a result, Baldwin currently was operating its plant at about 75 percent of one-shift capacity. Thus, the added volume from Hi-Valu's purchases could possibly be very attractive. If agreement could be reached on prices, Hi-Valu would sign a contract guaranteeing to Baldwin that Hi-Valu would buy its housebrand bicycles only from Baldwin for a three-year period. The contract would then be automatically extended on a year-to-year basis, unless one party gave the other at least three-months' notice that it did not wish to extend the contract.

Suzanne Leister realized she needed to do some preliminary financial analysis of this proposal before having any further discussions with Karl Knott. She had written on a pad the information she had gathered to use in her initial analysis; this information is shown in Exhibit 2.

*Note: The American. From 1%7 through 1970 sales average about 7 million units a year. By 1973 the total was up to a record 15 million units. By 1975 volume was back down to 7. 5 million units. By 1982 volume was back up to 10 million units, still well below the peak years.

EXHIBIT I Financial Statements (thousands of dollars)

BALDWIN BICYCLE COMPANY

Balance Sheet

As or December 31, 1982

Assets Liabilities and Owners' Equity

Cash $ 342 Accounts payable $ 512

Accounts receivable 1, 359 Accrued expenses 340

Inventories 2, 756 Short-term bank loans 2, 626

Plant and equipment (net) .. 3, 635 Long-term note payable 1, 512

Total liabilities 4, 990

Owners' equity 3, 102

$8, 092 $8, 092

Income Statement

For the Year Ended December 31, 1982

Sales revenues $10, 872

Cost of sales 8, 045

Gross margin 2, 827

Selling and administrative expenses 2, 354

Income before taxes 473

Income tax expense 218

Net income $ 253

Source: R. N. Anthony and J. S. Reece, Accounting: Text and Cases (Homewood, Ill.: Richard D. Irwin, 1983), pp. 742-44/

EXHIBIT 2 Data Pertinent to Hi-Valu Proposal (Notes taken by Suzanne Leister)

1. Estimated first-year costs of producing Challenger bicycles (average unit costs, assuming a constant mix of models):

Materials $39. 80*

Labor 19. 60

Overhead (@ 125% of labor)..... 24. 50**

.....$83. 90

2. Unit price and annual volume: Hi-Valu estimates it will need 25, 000 bikes a year and proposes to pay us (based on the assumed mix of models) an

average of $92. 29 per bike for the first year. Contract to contain an inflation escalation clause such that price will increase in proportion to inflation-caused increases in costs shown in item 1, above; thus, the $92. 29 and $83. 90 figures are, in effect, " constant-dollar' amounts. Knott intimated that there was very little, if any, negotiating leeway in the $92. 29 proposed initial price.

3. Asset-related costs (annual variable costs, as percent of dollar value of assets):

Pretax cost of funds (to finance receivables or inventories) 18. 0%

Recordkeeping costs (for receivables or inventories) 1. 0

Inventory insurance 0. 3

State property tax on inventory 0. 7

Inventory-handling labor and equipment 3. 0

Pilferage, obsolescence, breakage, etc 0. 5

4. Assumptions for Challenger-related added inventories (average over the year):

Materials: two month's supply.

Work in process: 1, 000 bikes, half completed (but all materials for them issued).

Finished goods: 500 bikes (awaiting next carload lot shipment to a Hi-Valu warehouse).

5. Impact on our regular sales: Some customers comparison shop for bikes, and many of them are likely to recognize a Challenger bike as a good value when compared with a similar bike (either ours or a competitor’s) at a higher price in a nonchain toy or bicycle store. In 1982, we sold 98, 791 bikes. My best guess is that our sales over the next three years will be about 100, 000 bikes a year if we forego the Hi-Valu deal. If we accept it, I think we’ll lose

About 3, 000 units of our regular sales volume a year, since our retail a distribution is quite strong in Hi-Valu’s market regions. These estimates do not include the possibility that a few of our current dealers might drop our line if they find out we’re making bikes for Hi-Valu.

Note: The information about overhead in item 1 of case Exhibit 2 can be used to infer that fixed manufacturing overhead is about $1. 5 million per year.

Includes items specific to models for Hi-Valu, not used in our standard models.

* Accountant says about 40 percent of total production overhead cost is variable; 125 percent of DL$ rate is based on volume of 100, 000 bicycles per year.