

Product Evaluation Form

Step 1:

Determine fixed costs

Fixed costs are the business expenses that remain the same regardless of the number of products produced or services provided. Wages*, rent, marketing expenses, and equipment are examples of fixed costs.

The sample table below illustrates the fixed costs encountered by most JA companies. It assumes a company of 10 employees meeting 11 times.

(Please note: Wages are not paid for the first of the 12 meetings.)

| Expenses | Sample Company | Your Company |
|--|---|---------------------|
| A. JA company employee wage (11 two-hour meetings x \$.50 hour) | 22 hours, \$11 per employee, (10 employees x \$11 = \$110) | |
| B. JA company officer wage (11 meetings x \$2 per meeting) | \$22 per officer, (5 officers x \$22 = \$110) | |
| C. Rent and other fixed expenses, paid to local JA Area Office with sales tax upon liquidation | \$25 | |
| D. Marketing supplies | \$25 | |
| E. Other | | |
| F. Total fixed costs | \$270 | |

The Human Resources Department can tell you what the agreed-upon wage structure is. For most JA companies, the wage structure does not differ from the one previously noted; it is the same as the wage structure specified in the Charter/Bylaws approved in Meeting Two. The Marketing Department should recommend a marketing budget.

*Note: Wages are actually variable costs because the number of workers and hours needed to produce an item or good can vary as demand increases or decreases. In JA companies, however, workers typically are “employed” for a fixed number of hours. As a result, it is convenient to think of wages as a fixed cost for the purposes of this exercise.

Step 2:

Determine variable costs

The company’s variable costs are the expenses that fluctuate or “vary” with the number of goods produced and sold. For example, a company selling prepackaged candy will spend more on material as production increases. Variable cost can be related to both production and the sales process. For each unit sold, your company will have to pay sales commissions and sales tax. In Step 3 on the following page, you will have an opportunity to calculate these sales-related variable costs.

The following worksheet will help you estimate the variable cost of material when additional units are produced. With assistance from the Production Department, you will estimate your company’s material costs using the chart below.

| Product | Sample Company | Your Company |
|--------------------------------------|-----------------------|---------------------|
| A. Projected total cost of materials | \$100 | |
| B. Divided by the number of units | 100 | |
| C. Material cost per unit | \$1 | |

Step 3:**Determine prices**

Now that you have determined the fixed and variable costs for your product, you can establish a profitable price.

The following chart will help you determine your gross profit per unit at various test prices. Gross profit is the difference between the price and the variable costs of producing and selling your product.

- Enter one high and one low test price for your product. Include sales tax.
- Use the material cost per unit from Step 2.
- Calculate your gross profit per unit at different prices.

| | Sample Price #1 | Sample Price #2 | Test Price #1 | Test Price #2 |
|-------------------------------------|------------------------|------------------------|----------------------|----------------------|
| A. Net price per retail unit | \$5.00 | \$6.00 | | |
| Variable Costs | | | | |
| B. Sales commissions (10%) | -.50 | -.60 | | |
| C. Sales tax | -.25 | -.30 | | |
| D. Material cost per unit (Step 2) | -1.00 | -1.00 | | |
| E. Gross per unit | \$3.25 | \$4.10 | | |

Instructions:

Line A. Enter two test prices for your product. One price should be “low” and the other “high.”

Line B. Enter the 10 percent sales commission cost.

Line C. Enter the city and state sales tax amount. In this example, the sales tax rate is five percent ($\$5.00 \times .05 = .25$).

Line D. Enter the materials cost per unit from Step 2, Line C. Subtract Lines B, C, and D from Line A, and enter the result on Line E.

Line E. This is your gross profit per unit—the difference between your price and the variable costs per unit of production and sales.

Step 4:**Determine the break-even point**

A break-even analysis frequently is used by manufacturing companies to set prices. It helps a company determine the number of units that must be sold to cover costs (or break even).

| | Sample Price #1 | Sample Price #2 | Test Price #3 | Test Price #4 |
|--|------------------------|------------------------|----------------------|----------------------|
| Fixed Cost (Step 1) | \$270 | \$270 | | |
| Divide the Gross Profit per Unit | \$3.25 | \$4.10 | | |
| Break-Even Point (units) | 83 units | 66 units | | |

Individual and Group Sales Goal

After you calculate the break-even point for the desired price, determine how many units each employee will need to sell to break even. What about making a profit? After you reach the break-even point, your company begins to make a profit. The more you sell, the more sales commission you earn!

Individual sales goal: _____

Group sales goal: _____