## SECTION 2: Manipulating Profit Variables: Merchandising for a Profit

## Part 2: Skeletal Profit and Loss Statement: Calculating the P \& L Components

## Part 2: 2-8 Four Variables Adjusted for Profit

Since profit is essential to a company's existence, it is imperative that all functions and activities of the retail establishment focus on profit. Astute retailers know that the retail price component and the skeletal P \& L Statement components of net sales or sales volume, cost of goods sold, and operating expenses may be manipulated to increase profit or meet profit goals when other components impact profit negatively. Thus retailers constantly strive to increase sales volume, negotiate for lower costs of merchandise or shipping and handling costs, and control operating expenses. When these components are manipulated in combination, the retailer is better equipped to reach planned profit goals.

Nonetheless, it is not always easy for the retailer to simultaneously control all of these components. Sometimes the wholesale costs of goods increase, thus forcing the retailer to increase the retail price of the product. The retailer may then sell less units of the product classification, realizing a decrease in sales volume, while operating with the same expenses.

The retailer may be required to take deep markdowns on the merchandise in order to sell the goods. This activity may cause operating expenses to increase due to extra advertising and sales promotional costs and/or selling costs for additional personnel. On the other hand, operating expenses may be reduced to such a degree that sales volume decreases due to lack of marketing efforts and poor customer service. For example, some stores now have service centers for checkout within each department of the store. Therefore, management hires fewer sales associates for those departments and operates with less customer service. Conversely, some retailers have found that cutting customer service in order to reduce operating expenses can also reduce sales volume.

The retailer must constantly experiment with the profit variables of retail price, sales volume, cost of goods, and operating expenses in order to determine the most profitable mix for each retail store. The following examples will illustrate how these profit variables may be manipulated in order to achieve the desired profit goal for the retailer.

Note: The base example for all of the profit variable manipulations is shown below and illustrations for all variables are calculated on the following pages.

Example: A buyer in the Young Menswear Department of a major department store located in a university town bought 150 navy blazers for the fall selling season. The buyer paid $\$ 250.00$ for each blazer and retailed the blazer with a keystone plus $\$ 25.00$ markup. The blazers did not sell as quickly as expected due to a warmer, rainy fall climate. In addition, an economic decline in the regions also impacted sales.

Base: Skeletal P \& L Statement

| Component | Dollars (\$) | Percent (\%) |
| :--- | :---: | :---: |
| Net Sales | $150 \times \$ 525=\$ 78,750.00$ | $100.00 \%$ |
| - Cost of Goods Sold | $150 \times \$ 250=\$ 37,500.00$ | $47.62 \%$ |
| = Gross Margin | $=\$ 41,250.00$ | $52.38 \%$ |
| - Operating Expenses | $=\$ 23,625.00$ | $30.00 \%$ |


| $=($ Net $)$ Operating Profit | $=\$ 17,625.00$ | $22.38 \%$ |
| :--- | :--- | :--- |

## 1. Change in Retail Price:

For a weekend sales promotion, the buyer reduced the retail price of the blazers to 20\% off. Assuming that all of the blazers sold at that price, the following P \& L Statement illustrates the reduction in retail price of the blazers. The cost of goods sold and operating expenses remained constant, since the blazers were taken directly from stock. Plus, extra expenses were not incurred for the sale.
(a.) Calculate the new, reduced retail price.

Retail $\$=\$ 525.00 \times 20 \%(.20)$
Retail $\$=\$ 525.00-\$ 105.00$
Retail $\$=\$ 420.00$
(b.) Calculate net sales, gross margin and operating profit. (See P \& L Statement below.)

| Component | Dollars (\$) | Percent (\%) |
| :--- | :---: | :---: |
| Net Sales | $150 \times \$ 420=\$ 63,000.00$ | $100.00 \%$ |
| - Cost of Goods Sold | $150 \times \$ 250=\$ 37,500.00$ | $59.52 \%$ |
| = Gross Margin | $=\$ 25,500.00$ | $40.48 \%$ |
| - Operating Expenses | $=\$ 23,625.00$ | $37.50 \%$ |
| $=$ (Net) Operating Profit | $=\$ 1,875.00$ | $2.98 \%$ |

Note the decrease in the profit from $22.38 \%$ to $2.98 \%$ with a $20 \%$ reduction in the retail price. Also, it is very unlikely that the operating expenses would remain constant as given in the problem. More than likely the retailer would need to promote the sale and incur additional sales promotional costs.

## 2. Change in Sales Volume:

Sometimes when a trendy item is reduced, a larger quantity of the item will sell at the reduced price. Instead of initially reducing 150 blazers, the buyer ordered an additional 25 blazers for a total of 175 blazers to be reduced during the fraternity rush season. The retailer sold all the blazers at a reduced retail price of $\$ 450.00$. The cost of goods sold and operating expenses remained constant and did not change with this promotional sale.
(a.) Calculate the new net sales, cost of goods sold, gross margin and profit dollars. (See P \& L Statement below.)

| Component | Dollars (\$) | Percent (\%) |
| :--- | ---: | :---: |
| Net Sales | $175 \times \$ 450=\$ 78,750.00$ | $100.00 \%$ |
| - Cost of Goods Sold | $175 \times \$ 250=\$ 43,750.00$ | $55.56 \%$ |
| = Gross Margin | $=\$ 35,000.00$ | $44.44 \%$ |
| - Operating Expenses | $=\$ 23,625.00$ | $30.00 \%$ |
| = (Net) Operating Profit | $=\$ 11,375.00$ | $14.44 \%$ |

Note the change in profit with the increase in sales volume, while cost of goods sold and operating expenses do not change. However, it is not likely that operating expenses will remain the same because of the extra preparation of merchandise, record keeping and selling costs.

## 3. Change in Cost of Goods Sold:

Major vendors offer merchandise to retailers at a reduced wholesale cost at various times during the selling season. For example, some vendors offer their clients off-price (reduced wholesale costs) or special- cuts merchandise when the buyer makes the initial seasonal purchase. Or, vendors offer the retailer promotional specials or other select goods for special sales. Additionally, after the vendor's major shipping period, or at the end of the ordering season, vendors usually offer leftover merchandise known as closeouts at a reduced wholesale cost. Most of these buys can be placed in the retailer's stock or inventory at a retail price that is based on the original wholesale cost. Then, during the end-of-season sales period, the merchandise is reduced to offer the customer a good value and assist the retailer in making planned profit goals.

During the peak retail selling season, the buyer purchased a closeout of another 150 blazers at $\$ 200$ each and retailed the blazers at the $\$ 525.00$ price.
(a.) Calculate cost of goods sold, gross margin and operating profit. (See P \& L Statement below.)

| Component | Dollars (\$) | Percent (\%) |
| :--- | ---: | ---: |
| Net Sales | $150 \times \$ 525=\$ 78,750.00$ | $100.00 \%$ |
| - Cost of Goods Sold | $150 \times \$ 200=\$ 30,000.00$ | $38.10 \%$ |
| = Gross Margin | $=\$ 48,750.00$ | $61.90 \%$ |
| - Operating Expenses | $=\$ 23,625.00$ | $30.00 \%$ |
| $=$ (Net) Operating Profit | $=\$ 25,125.00$ | $31.90 \%$ |

Note how the cost of goods sold impacts the gross margin and operating profit. However, an increase in expenses might result due to extra receiving and marking costs or extra selling expenses.

## 4. Change in Operating Expenses:

Retailers constantly attempt to reduce expenses or at least keep them under control. The buyer in the Young Menswear Department reduced operating expenses by $\$ \mathbf{5 , 8 0 0 . 0 0}$ while selling the same quantity of blazers.
(a.) Calculate the operating profit. (See P \& L Statement below.)

| Component | Dollars (\$) | Percent (\%) |
| :--- | :---: | :---: |
| Net Sales | $150 \times \$ 525=\$ 78,750.00$ | $100.00 \%$ |
| - Cost of Goods Sold | $150 \times \$ 250=\$ 37,500.00$ | $47.62 \%$ |
| = Gross Margin | $=\$ 41,250.00$ | $52.38 \%$ |
| - Operating Expenses | $=\$ 17,825.00$ | $22.63 \%$ |
| = (Net) Operating Profit | $=\$ 23,425.00$ | $29.75 \%$ |

Note the change in the operating profit as compared to the base P \& L Statement.

In summary, usually if retail price or sales volume increase, profit will increase or if cost of goods sold and operating expenses decrease, profit will increase. However if sales volume increases, an increase in expenses often occurs because of increased selling costs, or marketing and promotional efforts. Thus, the increase in retail price and sales volume are off-set by an increase in expenses. The retailer must continually manipulate the four profit variables in order to find the most profitable pattern for each store.

