

A Guide To Financial Planning & Management
"Understanding Financial Statements"

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Introduction

This white paper may be used by anyone interested in learning the concepts of financial planning and management.

I. The Necessity of Financial Planning

There is one simple reason to understand and observe financial planning in your business--to avoid failure. Eight of ten new businesses fail primarily because of the lack of good financial planning.

Financial planning affects how and on what terms you will be able to attract the funding required to establish, maintain, and expand your business. Financial planning determines the raw materials you can afford to buy, the products you will be able to produce, and whether or not you will be able to market them efficiently. It affects the human and physical resources you will be able to acquire to operate your business. It will be a major determinant of whether or not you will be able to make your hard work profitable.

This white paper provides an overview of the essential components of financial planning and management. Used wisely, it will make the reader--the small business owner/manager--familiar enough with the fundamentals to have a fighting chance of success in today's highly competitive business environment.

A clearly conceived, well documented financial plan, establishing goals and including the use of Pro Forma Statements and Budgets to ensure financial control, will demonstrate not only that you know what you want to do, but that you know how to accomplish it. This demonstration is essential to attract the capital required by your business from creditors and investors.

What Is Financial Management?

Very simply stated, financial management is the use of financial statements that reflect the financial condition of a business to identify its relative strengths and weaknesses. It enables you to plan, using projections, future financial performance for capital, asset, and personnel requirements to maximize the return on shareholders' investment.

Tools of Financial Planning

This white paper introduces the tools required to prepare a financial plan for your business's development, including the following:

- * Basic Financial Statements--the Balance Sheet and Statement of Income
- * Ratio Analysis--a means by which individual business performance is compared to similar businesses in the same category
- * The Pro Forma Statement of Income--a method used to forecast future profitability
- * Break-Even Analysis--a method allowing the small business person to calculate the sales level at which a business recovers all its costs or expenses
- * The Cash Flow Statement--also known as the Budget identifies the flow of cash into and out of the business
- * Pricing formulas and policies--used to calculate profitable selling prices for products and services

- * Types and sources of capital available to finance business operations
- * Short- and long-term planning considerations necessary to maximize profits

The business owner/manager who understands these concepts and uses them effectively to control the evolution of the business is practicing sound financial management thereby increasing the likelihood of success.

II. Understanding Financial Statements: A Health Checkup for Your Business

Financial Statements record the performance of your business and allow you to diagnose its strengths and weaknesses by providing a written summary of financial activities. There are two primary financial statements: the Balance Sheet and the Statement of Income.

The Balance Sheet

The Balance Sheet provides a picture of the financial health of a business at a given moment, usually at the close of an accounting period. It lists in detail those material and intangible items the business owns (known as its assets) and what money the business owes, either to its creditors (liabilities) or to its owners (shareholders' equity or net worth of the business).

Assets include not only cash, merchandise inventory, land, buildings, equipment, machinery, furniture, patents, trademarks, and the like, but also money due from individuals or other businesses (known as accounts or notes receivable).

Liabilities are funds acquired for a business through loans or the sale of property or services to the business on credit. Creditors do not acquire business ownership, but promissory notes to be paid at a designated future date.

Shareholders' equity (or net worth or capital) is money put into a business by its owners for use by the business in acquiring assets.

At any given time, a business's assets equal the total contributions by the creditors and owners, as illustrated by the following formula for the Balance Sheet:

$$\text{Assets} = \text{Liabilities} + \text{Net Worth}$$

Assets (Total funds invested in assets of the business) =
 Liabilities (Funds supplied to the business by its creditors) +
 Net Worth (Funds supplied to the business by its owners)

This formula is a basic premise of accounting. If a business owes more money to creditors than it possesses in value of assets owned, the net worth or owner's equity of the business will be a negative number.

The Balance Sheet is designed to show how the assets, liabilities, and net worth of a business are distributed at any given time. It is usually prepared at regular intervals; e.g., at each month's end but especially at the end of each fiscal (accounting) year.

By regularly preparing this summary of what the business owns and owes (the Balance Sheet), the business owner/manager can identify and analyze trends in the financial strength of the business. It permits timely modifications, such as gradually decreasing the amount of money the business owes to creditors and increasing the amount the business owes its owners.

All Balance Sheets contain the same categories of assets, liabilities, and net worth. Assets are arranged in decreasing order of how quickly they can be turned into cash (liquidity). Liabilities are listed in order of how soon they must be repaid, followed by retained earnings (net worth or owner's equity), as illustrated in Figure 2-1, below, the sample Balance Sheet for ABC Company.

The categories and format of the Balance Sheet are established by a system known as Generally Accepted Accounting Principles (GAAP). The system is applied to all companies, large or small, so anyone reading the Balance Sheet can readily understand the story it tells.

Figure 2-1

ABC Company December 31, 20__ Balance Sheet			
Cash	\$ 1,896	Notes Payable, Bank	\$ 2,000
Accounts Receivable	1,456	Accounts Payable	2,240
Inventory	6,822	Accruals	940
Total Current Assets	\$10,174	Total Current Liabilities	\$ 5,180
Equipment and Fixtures	1,168	Total Liabilities	5,180
Prepaid Expenses	1,278	Net Worth	7,440
Total Assets	\$12,620	Total Liabilities & New Worth	\$12,620

Balance Sheet Categories

Assets: An asset is anything the business owns that has monetary value.

* Current Assets include cash, government securities, marketable securities, accounts receivable, notes receivable (other than from officers or employees), inventories, prepaid expenses, and any other item that could be converted into cash within one year in the normal course of business.

* Fixed Assets are those acquired for long-term use in a business such as land, plant, equipment, machinery, leasehold improvements, furniture, fixtures, and any other items with an expected useful business life measured in years (as opposed to items that will wear out or be used up in less than one year and are usually expensed when they are purchased). These assets are typically not for resale and are recorded in the Balance Sheet at their net cost less accumulated depreciation.

* Other Assets include intangible assets, such as patents, royalty arrangements, copyrights, exclusive use contracts, and notes receivable from officers and employees.

Liabilities: Liabilities are the claims of creditors against the assets of the business (debts owed by the business).

* Current Liabilities are accounts payable, notes payable to banks, accrued expenses (wages, salaries), taxes payable, the current portion (due within one year) of long-term debt, and other obligations to creditors due within one year.

* Long-Term Liabilities are mortgages, intermediate and long-term bank loans, equipment loans, and any other obligation for money due to a creditor with a maturity longer than one year.

* Net Worth is the assets of the business minus its liabilities. Net worth equals the owner's equity. This equity is the investment by the owner plus any profits or minus any losses that have accumulated in the business.

The Statement of Income

The second primary report included in a business's Financial Statement is the Statement of Income. The Statement of Income is a measurement of a company's sales and expenses over a specific period of time. It is also prepared at regular intervals (again, each month and fiscal year end) to show the results of operating during those accounting periods. It too follows Generally Accepted Accounting Principles (GAAP) and contains specific revenue and expense categories regardless of the nature of the business.

Statement of Income Categories

The Statement of Income categories are calculated as described below:

- * Net Sales (gross sales less returns and allowances)
- * Less Cost of Goods Sold (cost of inventories)
- * Equals Gross Margin (gross profit on sales before operating expenses)
- * Less Selling and Administrative Expenses (salaries, wages, payroll taxes and benefits, rent, utilities, maintenance expenses, office supplies, postage, automobile/vehicle expenses, insurance, legal and accounting expenses, depreciation)
- * Equals Operating Profit (profit before other non-operating income or expense)
- * Plus Other Income (income from discounts, investments, customer charge accounts)
- * Less Other Expenses (interest expense)
- * Equals Net Profit (Loss) Before Tax (the figure on which your tax is calculated)
- * Less Income Taxes (if any are due)
- * Equals Net Profit (Loss) After Tax

For an example of a Statement of Income, see Figure 2-2, the statement of ABC Company.

Figure 2-2
ABC Company
December 31, 20__
Income Statement

Net Sales		\$68,116
Cost of Goods Sold		47,696
 Gross Profit on Sales		 \$20,420
Expenses		
Wages	\$6,948	
Delivery Expenses	954	
Bad Debts Allowances	409	
Communications	204	
Depreciation Allowance	409	
Insurance	613	
Taxes	1,021	
Advertising	1,566	
Interest	409	
Other Charges	749	
 Total Expenses		 \$13,282
Net Profit		7,138
Other Income		886
 Total Net Income		 \$ 8,024

Calculating the Cost of Goods Sold

Calculation of the Cost of Goods Sold category in the Statement of Income (or Profit-and-Loss Statement as it is sometimes called) varies depending on whether the business is retail, wholesale, or manufacturing. In retailing and wholesaling, computing the cost of goods sold during the accounting period involves beginning and ending inventories. This, of course, includes purchases made during the accounting period. In manufacturing it involves not only finished-goods inventories, but also raw materials inventories goods-in-process inventories, direct labor, and direct factory overhead costs.

Regardless of the calculation for Cost of Goods Sold, deduct the Cost of Goods Sold from Net Sales to get Gross Margin or Gross Profit. From Gross Profit, deduct general or indirect overhead such as selling expenses, office expenses, and interest expenses, to calculate your Net Profit. This is the final profit after all costs and expenses for the accounting period have been deducted.

III. Financial Ratio Analysis

The Balance Sheet and the Statement of Income are essential, but they are only the starting point for successful financial management. Apply Ratio Analysis to Financial Statements to analyze the success, failure, and progress of your business.

Ratio Analysis enables the business owner/manager to spot trends in a business and to compare its performance and condition with the average performance of similar businesses in the same industry. To do this compare your ratios with the average of businesses similar to yours and compare your own ratios for several successive years, watching especially for any unfavorable trends that may be starting. Ratio analysis may provide the all-important early warning indications that allow you to solve your business problems before your business is destroyed by them.

Balance Sheet Ratio Analysis

Important Balance Sheet Ratios measure liquidity and solvency (a business's ability to pay its bills as they come due) and leverage (the extent to which the business is dependent on creditors' funding). They include the following ratios:

Liquidity Ratios. These ratios indicate the ease of turning assets into cash. They include the Current Ratio, Quick Ratio, and Working Capital.

Current Ratios. The Current Ratio is one of the best known measures of financial strength. It is figured as shown below:

$$\text{Current Ratio} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$$

The main question this ratio addresses is: "Does your business have enough current assets to meet the payment schedule of its current debts with a margin of safety for possible losses in current assets, such as inventory shrinkage or collectable accounts?" A generally acceptable current ratio is 2 to 1. But whether or not a specific ratio is satisfactory depends on the nature of the business and the characteristics of its current assets and liabilities. The minimum acceptable current ratio is obviously 1:1, but that relationship is usually playing it too close for comfort.

If you decide your business's current ratio is too low, you may be able to raise it by:

- * Paying some debts.
- * Increasing your current assets from loans or other borrowings with a maturity of more than one year.
- * Converting noncurrent assets into current assets.
- * Increasing your current assets from new equity contributions.
- * Putting profits back into the business.

Quick Ratios. The Quick Ratio is sometimes called the "acid-test" ratio and is one of the best measures of liquidity. It is figured as shown below:

$$\text{Quick Ratio} = \frac{\text{Cash} + \text{Government Securities} + \text{Receivables}}{\text{Total Current Liabilities}}$$

The Quick Ratio is a much more exacting measure than the Current Ratio. By excluding inventories, it concentrates on the really liquid assets, with value that is fairly certain. It helps answer the question: "If all sales revenues should disappear, could my business meet its current obligations with the readily convertible 'quick' funds on hand?"

An acid-test of 1:1 is considered satisfactory unless the majority of your "quick assets" are in accounts receivable, and the pattern of accounts receivable collection lags behind the schedule for paying current liabilities.

Working Capital. Working Capital is more a measure of cash flow than a ratio. The result of this calculation must be a positive number. It is calculated as shown below:

$$\text{Working Capital} = \text{Total Current Assets} - \text{Total Current Liabilities}$$

Bankers look at Net Working Capital over time to determine a company's ability to weather financial crises. Loans are often tied to minimum working capital requirements.

A general observation about these three Liquidity Ratios is that the higher they are the better, especially if you are relying to any significant extent on creditor money to finance assets.

Leverage Ratio

This Debt/Worth or Leverage Ratio indicates the extent to which the business is reliant on debt financing (creditor money versus owner's equity):

$$\text{Debt/Worth Ratio} = \frac{\text{Total Liabilities}}{\text{Net Worth}}$$

Generally, the higher this ratio, the more risky a creditor will perceive its exposure in your business, making it correspondingly harder to obtain credit.

Income Statement Ratio Analysis

The following important State of Income Ratios measure profitability:

Gross Margin Ratio

This ratio is the percentage of sales dollars left after subtracting the cost of goods sold from net sales. It measures the percentage of sales dollars remaining (after obtaining or manufacturing the goods sold) available to pay the overhead expenses of the company.

Comparison of your business ratios to those of similar businesses will reveal the relative strengths or weaknesses in your business. The Gross Margin Ratio is calculated as follows:

$$\text{Gross Margin Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}}$$

(Gross Profit = Net Sales - Cost of Goods Sold)

Net Profit Margin Ratio

This ratio is the percentage of sales dollars left after subtracting the Cost of Goods sold and all expenses, except income taxes. It provides a good opportunity to compare your company's "return on sales" with the performance of other companies in your industry. It is calculated before income tax because tax rates and tax liabilities vary from company to company for a wide variety of reasons, making comparisons after taxes much more difficult. The Net Profit Margin Ratio is calculated as follows:

$$\text{Net Profit Margin Ratio} = \frac{\text{Net Profit Before Tax}}{\text{Net Sales}}$$

Management Ratios

Other important ratios, often referred to as Management Ratios, are also derived from Balance Sheet and Statement of Income information.

Inventory Turnover Ratio

This ratio reveals how well inventory is being managed. It is important because the more times inventory can be turned in a given operating cycle, the greater the profit. The Inventory Turnover Ratio is calculated as follows:

$$\text{Inventory Turnover Ratio} = \frac{\text{Net Sales}}{\text{Average Inventory at Cost}}$$

Accounts Receivable Turnover Ratio

This ratio indicates how well accounts receivable are being collected. If receivables are not collected reasonably in accordance with their terms, management should rethink its collection policy. If receivables are excessively slow in being converted to cash, liquidity could be severely impaired. The Accounts Receivable Turnover Ratio is calculated as follows:

$$\frac{\text{Net Credit Sales/Year}}{365 \text{ Days/Year}} = \text{Daily Credit Sales}$$

$$\text{Accounts Receivable Turnover (in days)} = \frac{\text{Accounts Receivable}}{\text{Daily Credit Sales}}$$

Return on Assets Ratio

This measures how efficiently profits are being generated from the assets employed in the business when compared with the ratios of firms in a similar business. A low ratio in comparison with industry averages indicates an inefficient use of business assets. The Return on Assets Ratio is calculated as follows:

$$\text{Return on Assets} = \frac{\text{Net Profit Before Tax}}{\text{Total Assets}}$$

Return on Investment (ROI) Ratio.

The ROI is perhaps the most important ratio of all. It is the percentage of return on funds invested in the business by its owners. In short, this ratio tells the owner whether or not all the effort put into the business has been worthwhile. If the ROI is less than the rate of return on an alternative, risk-free investment such as a bank savings account or certificate of deposit, the owner may be wiser to sell the company, put the money in such a savings instrument, and avoid the daily struggles of small business management. The ROI is calculated as follows:

$$\text{Return on Investment} = \frac{\text{Net Profit before Tax}}{\text{Net Worth}}$$

These Liquidity, Leverage, Profitability, and Management Ratios allow the business owner to identify trends in a business and to compare its progress with the performance of others through data published by various sources.

The owner may thus determine the business's relative strengths and weaknesses.

Sources of Comparative Information

Sources of comparative financial information which you may obtain from your public library or the publishers include the following:

Almanac of Business and Industrial Financial Ratios, Leo Troy,
Prentice-Hall, Inc., Englewood Cliffs, NJ 07632

Annual Statement Studies, Robert Morris Associates, P. O. Box 8500, S-1140,
Philadelphia, PA 19178

Expenses in Retail Business, National Cash Register Corporation, Corporate
Advertising and Sales Promotion Dayton, OH 45479.

Key Business Ratios, Dun & Bradstreet, Inc., 99 Church Street, New York, NY
10007, ATTN: Public Relations and Advertising Department

IV. Forecasting Profits

Forecasting, particularly on a short-term basis (one year to three years), is essential to planning for business success. This process, estimating future business performance based on the actual results from prior periods, enables the business owner/manager to modify the operation of the business on a timely basis. This allows the business to avoid losses or major financial problems should some future results from operations not conform with reasonable expectations. Forecasts--or Pro Forma Income Statements and Cash Flow Statements as they are usually called--also provide the most persuasive management tools to apply for loans or attract investor money. As a business expands, there will inevitably be a need for more money than can be internally generated from profits.

Facts Affecting Pro Forma Statements

Preparation of Forecasts (Pro Forma Statements) requires assembling a wide array of pertinent, verifiable facts affecting your business and its past performance. These include:

- * Data from prior financial statements, particularly:
 - a. Previous sales levels and trends
 - b. Past gross percentages
 - c. Average past general, administrative, and selling expenses necessary to generate your former sales volumes
 - d. Trends in the company's need to borrow (supplier, trade credit, and bank credit) to support various levels of inventory and trends in accounts receivable required to achieve previous sales volumes
- * Unique company data, particularly:
 - a. Plant capacity
 - b. Competition
 - c. Financial constraints
 - d. Personnel availability
- * Industry-wide factors, including:
 - a. Overall state of the economy
 - b. Economic status of your industry within the economy
 - c. Population growth
 - d. Elasticity of demand for the product or service your business provides
 - e. Availability of raw materials

Once these factors are identified, they may be used in Pro Formas, which estimate the level of sales, expense, and profitability that seem possible in a future period of operations.

The Pro Forma Income Statement

In preparing the Pro Forma Income Statement, the estimate of total sales during a selected period is the most critical "guesstimate." Employ business experience from past financial statements. Get help from management and salespeople in developing this all-important number.

Then assume, for example, that a 10 percent increase in sales volume is a realistic and attainable goal. Multiply last year's net sales by 1.10 to get this year's estimate of total net sales. Next, break down this total, month by month, by looking at the historical monthly sales volume. From this you can determine what percentage of total annual sales fell on the average in each of those months over a minimum of the past three years. You may find that 75 percent of total annual sales volume was realized during the six months from July through December in each of those years and that the remaining 25 percent of sales was spread fairly evenly over the first six months of the year.

Next, estimate the cost of goods sold by analyzing operating data to determine on a monthly basis what percentage of sales has gone into cost of goods sold in the past. This percentage can then be adjusted for expected variations in costs, price trends, and efficiency of operations.

Operating expenses (sales, general and administrative expenses, depreciation, and interest), other expenses, other income, and taxes can then be estimated through detailed analysis and adjustment of what they were in the past and what you expect them to be in the future.

Comparison with Actual Monthly Performance

Putting together this information month by month for a year into the future will result in your business's Pro Forma Statement of Income. Use it to compare with the actual monthly results from operations by using the SBA form 1099 (4-82) Operating Plan Forecast (Profit and Loss Projection). Obtain this form from your local SBA office. You will find it helpful to refer to the SBA Guidelines for Profit and Loss Projection. Preparation of the information is summarized below and on the back of the form 1099.

Revenue (Sales)

* List the departments within the business. For example, if your business is appliance sales and service, the departments would include new appliances, used appliances, parts, in-shop service, on-site service.

* In the "Estimate" columns, enter a reasonable projection of monthly sales for each department of the business. Include cash and on-account sales. In the "Actual" columns, enter the actual sales for the month as they become available.

* Exclude from the Revenue section any revenue not strictly related to the business.

Cost of Sales

* Cite costs by department of the business, as above.

* In the "Estimate" columns, enter the cost of sales estimated for each month for each department. For product inventory, calculate the cost of the goods sold for each department (beginning inventory plus purchases and

transportation costs during the month minus the inventory). Enter "Actual" costs each month as they accrue.

Gross Profit

* Subtract the total cost of sales from the total revenue.

Expenses

* Salary Expenses: Base pay plus overtime.

* Payroll Expenses: Include paid vacations, sick leave, health insurance, unemployment insurance, Social Security taxes.

* Outside Services: Include costs of subcontracts, overflow work farmed-out, special or one-time services.

* Supplies: Services and items purchased for use in the business, not for resale.

* Repairs and Maintenance: Regular maintenance and repair, including periodic large expenditures, such as painting or decorating.

* Advertising: Include desired sales volume, classified directory listing expense, etc.

* Car, Delivery and Travel: Include charges if personal car is used in the business. Include parking, tolls, mileage on buying trips, repairs, etc.

* Accounting and Legal: Outside professional services.

* Rent: List only real estate used in the business.

* Telephone.

* Utilities: Water, heat, light, etc.

* Insurance: Fire or liability on property or products, worker's compensation.

* Taxes: Inventory, sales, excise, real estate, others.

* Interest.

* Depreciation: Amortization of capital assets.

* Other Expenses (specify each): Tools, leased equipment, etc.

* Miscellaneous (unspecified): Small expenditures without separate accounts.

Net Profit

* To find net profit, subtract total expenses from gross profit.

The Pro Forma Statement of Income, prepared on a monthly basis and culminating in an annual projection for the next business fiscal year, should be revised not less than quarterly. It must reflect the actual performance achieved in the immediately preceding three months to ensure its continuing usefulness as one of the two most valuable planning tools available to management.

Should the Pro Forma reveal that the business will likely not generate a profit from operations, plans must immediately be developed to identify what to do to at least break even--increase volume, decrease expenses, or put more owner capital in to pay some debts and reduce interest expenses.

Break-Even Analysis

"Break-Even" means a level of operations at which a business neither makes a profit nor sustains a loss. At this point, revenue is just enough to cover expenses. Break-Even Analysis enables you to study the relationship of volume, costs, and revenue.

Break-Even requires the business owner/manager to define a sales level--either in terms of revenue dollars to be earned or in units to be sold within a given accounting period--at which the business would earn a before tax net profit of zero. This may be done by employing one of various formula calculations to the business estimated sales volume, estimated fixed costs, and estimated variable costs.

Generally, the volume and cost estimates assume the following conditions:

- * A change in sales volume will not affect the selling price per unit;
- * Fixed expenses (rent, salaries, administrative and office expenses, interest, and depreciation) will remain the same at all volume levels; and
- * Variable expenses (cost of goods sold, variable labor costs including overtime wages and sales commissions) will increase or decrease in direct proportion to any increase or decrease in sales volume.

Two methods are generally employed in Break-Even Analysis, depending on whether the break-even point is calculated in terms of sales dollar volume or in number of units that must be sold.

Break-Even Point in Sales Dollars

The steps for calculating the first method are shown below:

1. Obtain a list of expenses incurred by the company during its past fiscal year.
2. Separate the expenses listed in Step 1 into either a variable or a fixed expense classification. (See Figure 4-1, below, under "Classification of Expenses.")
3. Express the variable expenses as a percentage of sales. In the condensed income statement (Figure 4-1) of the Small Business Specialties Co. (below), net sales were \$1,200,000. In Step 2, variable expenses were found to amount to \$720,000. Therefore, variable expenses are 60 percent of net sales (\$720,000 divided by \$1,200,000). This means that 60 cents of every sales dollar is required to cover variable expenses. Only the remainder, 40 cents of every dollar, is available for fixed expenses and profit.
4. Substitute the information gathered in the preceding steps in the following basic break-even formula to calculate the breakeven point.

Figure 4-1

THE SMALL-BUSINESS SPECIALTIES CO.
 Condensed Income Statement
 For year ending Dec. 31, 19-

Net sales (60,000 units @ \$20 per unit).....	\$1,200,000
Less cost of goods sold:	
Direct material.....	\$195,000
Direct labor.....	215,000
Manufacturing expenses (Schedule A).....	300,000
Total.....	710,000
Gross profit.....	490,000
Less operating expenses:	
Selling expenses (Schedule B).....	\$200,000
General and administrative expenses (Schedule C).....	210,000
Total.....	410,000
Net Income.....	\$ 80,000

Supporting Schedules of Expenses Other Than Direct Material and Labor

	Total	Schedule A manufacturing expenses	Schedule B selling expenses	Schedule C general and administrative expenses
Rent.....	\$ 60,000	\$ 30,000	\$ 8,000	\$ 22,000
Insurance.....	11,000	9,000	1,000	1,000
Commissions.....	120,000	120,000
Property tax.....	12,000	10,000	1,000	1,000
Telephone.....	7,000	1,000	5,000	1,000
Depreciation.....	80,000	70,000	5,000	5,000
Power.....	100,000	100,000
Light.....	60,000	30,000	10,000	20,000
Officers' salaries...	260,000	50,000	50,000	160,000
Total.....	\$710,000	\$300,000	\$200,000	\$210,000

Classification of Expenses

	Total	Variable	Fixed
Direct material.....	\$ 195,000	195,000
Direct labor.....	215,000	215,000
Manufacturing expenses.....	300,000	100,000	\$200,000
Selling expenses.....	200,000	50,000
General and admin. expenses.....	210,000	60,000	150,000
Total.....	\$1,120,000	\$720,000	\$400,000

Where: $S = F + V$ (Sales at the break-even point)
 F = Fixed expenses
 V = Variable expenses expressed as a percentage of sales.

This formula means that when sales revenues equal the fixed expenses and variable expenses incurred in producing the sales revenues, there will be no profit or loss. At this point, revenue from sales is just sufficient to cover the fixed and the variable expenses. In this formula "S" is the break even point.

For the Small Business Specialties Co., the break-even point (using the basic formula and data from Figure 4-2) may be calculated as follows:

$$\begin{aligned} S &= F + V \\ S &= \$400,000 + 0.60S \\ 10S &= \$4,000,000 + 6S \\ 10S - 6S &= \$4,000,000 \\ 4S &= \$4,000,000 \\ S &= \$1,000,000 \end{aligned}$$

Proof that this calculation is correct follows:

Sales at break-even point per calculation	\$1,000,000
Less variable expenses (60 percent of sales)	600,000
Marginal income	400,000
Less fixed expenses	400,000
Equals neither profit nor loss	\$ 0

Modification: Break-Even Point to Obtain Desired Net Income.

The first break-even formula can be modified to show the dollar sales required to obtain a certain amount of desired net income. To do this, let "S" mean the sales required to obtain a certain amount of net income, say \$80,000. The formula then reads:

$$\begin{aligned} S &= F + V + \text{Desired Net Income} \\ S &= \$400,000 + 0.60S + \$80,000 \\ 10S &= \$4,000,000 + 6S + 800,000 \\ 4S &= \$4,800,000 \\ S &= \$1,200,000 \end{aligned}$$

Break-Even Point in Units to be Sold

You may want to calculate the break-even point in terms of units to be sold instead of sales dollars. If so, a second formula (in which "S" means units to be sold to break even) may be used:

Break-even Sales	=	Fixed expenses	
(S = Units)		-----	
		Unit sales price - Unit variable expenses	
S	=	\$400,000	= \$400,000

		\$20 - \$12	\$8
S	=	50,000 units	

The Small Business Specialties Co. must sell 50,000 units at \$20 per unit to break even under the assumptions contained in this illustration. The sale of 50,000 units at \$20 each equals \$1 million, the break-even sales volume in dollars calculated in the basic formula. This formula indicates there is \$8 per unit of sales that can be used to cover the \$400,000 fixed expense. Then \$400,000 divided by \$8 gives the number of units required to break even.

Modification: Break-Even Point in Units to be Sold to Obtain Desired Net Income.

The second formula can be modified to show the number of units required to obtain a certain amount of net income. In this case, let S mean the number of units required to obtain a certain amount of net income, again say \$80,000. The formula then reads as follows:

$$S = \frac{\text{Fixed expenses} + \text{Net income}}{\text{Unit sales price} - \text{Unit variable expense}}$$

$$S = \frac{\$400,000 + \$80,000}{\$20 - \$12} = \frac{\$480,000}{\$8}$$

$$S = 60,000 \text{ units}$$

Break-even Analysis may also be represented graphically by charting the sales dollars or sales units required to break even as in Figure 4-2, below.

Remember: Increased sales do not necessarily mean increased profits. If you know your company's break-even point, you will know how to price your product to make a profit. If you cannot make an acceptable profit, alter or sell your business before you lose your retained earnings.

V. Cash Flow Management: Budgeting and Controlling Costs

If there is anything more important to the successful financial management of a business than the thorough, thoughtful preparation of Pro Forma Income Statements, it is the preparation of the Cash Flow Statement, sometimes called the Cash Flow Budget.

The Cash Flow Statement

The Cash Flow Statement identifies when cash is expected to be received and when it must be spent to pay bills and debts. It shows how much cash will be needed to pay expenses and when it will be needed. It also allows the manager to identify where the necessary cash will come from. For example, will it be internally generated from sales and the collection of accounts receivable--or must it be borrowed? (The Cash Flow Projection deals only with actual cash transactions; depreciation and amortization of good will or other non-cash expense items are not considered in this Pro Forma.)

The Cash Flow Statement, based on management estimates of sales and obligations, identifies when money will be flowing into and out of the business. It enables management to plan for shortfalls in cash resources so short term working capital loans may be arranged in advance. It allows management to schedule purchases and payments in a way that enables the business to borrow as little as possible. Because all sales are not cash sales management must be able to forecast when accounts receivable will become "cash in the bank" and when expenses--whether regular or seasonal--must be paid so cash shortfalls will not interrupt normal business operations.

The Cash Flow Statement may also be used as a Budget, permitting the manager increased control of the business through continuous comparison of actual receipts and disbursements against forecast amounts. This comparison helps the small business owner identify areas for timely improvement in financial management.

By closely watching the timing of cash receipts and disbursements, cash balance on hand, and loan balances, management can readily identify such things as deficiencies in collecting receivables, unrealistic trade credit or loan repayment schedules. Surplus cash that may be invested on a short-term basis or used to reduce debt and interest expenses temporarily can be recognized. In short, it is the most valuable tool management has at its disposal to refine the day-to-day operation of a business. It is an important financial tool bank lenders evaluate when a business needs a loan, for it demonstrates not only how large a loan is required but also when and how it can be repaid.

A Cash Flow Statement or Budget can be prepared for any period of time. However, a one-year budget matching the fiscal year of your business is recommended. As in the preparation and use of the Pro Forma Statement of Income, the projected Cash Flow Statement should be prepared on a monthly basis for the next year. It should be revised not less than quarterly to reflect actual performance in the preceding three months of operations to check its projections.

In preparing the Cash Flow Statement or Budget start with the sales budget. Other budgets are related directly or indirectly to this budget. The following is a sales forecast in units:

Sales Budget--Units For the Year Ended December 31, 20__

Territory	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
East.....	26,000	5,000	6,000	7,000	8,000
West.....	11,000	2,000	2,500	3,000	3,500
	37,000	7,000	8,500	10,000	11,500

Assume you sell a single product and the sales price for it is \$10. Your sales budget in terms of dollars would look like this:

Sales Budget--Dollars For the Year Ended December 31, 20__

Territory	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
East.....	\$260,000	\$50,000	\$80,000	\$ 70,000	\$ 80,000
West.....	110,000	20,000	25,000	30,000	35,000
	\$370,000	\$70,000	\$85,000	\$100,000	\$115,000

Say the estimated per unit cost of the product is \$1.50 for direct material, \$2.50 for direct labor, and \$1.00 for manufacturing overhead. By applying unit costs to the sales budget in units, you would come out with this budget:

Cost of Goods Sold Budget For the Year Ended December 31, 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Direct material.....	\$ 55,500	\$10,500	\$12,750	\$15,000	\$17,250
Direct labor.....	92,500	17,500	21,250	25,000	28,750
Mfg. overhead.....	37,000	7,000	8,500	10,000	11,500
	\$185,000	\$35,000	\$42,500	\$50,000	\$57,500

Later on, before a cash budget can be compiled, you will need to know the estimated cash requirements for selling expenses. Therefore, you prepare a budget for selling expenses and another for cash expenditures for selling expenses (total selling expenses less depreciation):

Selling Expenses Budget For the Year Ended December 31 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Commissions.....	\$46,500	\$ 8,750	\$10,625	\$12,500	\$14,375
Rent.....	9,250	1,750	2,125	2,500	2,875
Advertising.....	9,250	1,750	2,125	2,500	2,875
Telephone.....	4,625	875	1,062	1,250	1,437
Depreciation--office....	900	225	225	225	225
Other.....	22,250	4,150	5,088	6,025	6,983
	\$92,500	\$17,500	\$21,250	\$25,000	\$28,750

Selling Expenses Budget--Cash Requirements For the Year Ended December 31, 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Total selling expenses..	\$92,500	\$17,500	\$21,250	\$25,000	\$28,750
Less: depreciation..... expense--office.....	900	225	225	225	225
Cash requirements.....	\$91,600	\$17,275	\$21,025	\$24,775	\$28,525

Basic information for an estimate of administrative expenses for the coming year is easily compiled. Again, from that budget you can estimate cash requirements for those expenses to be used subsequently in preparing the cash budget.

Administrative Expenses Budget For the Year Ended December 31, 20__

Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Salaries.....\$22,200	\$4,200	\$5,100	\$ 6,000	\$ 6,900
Insurance..... 1,850	350	425	500	575
Telephone..... 1,850	350	425	500	575
Supplies..... 3,700	700	850	1,000	1,150
Bad debt expenses..... 3,700	700	850	1,000	1,150
Other expenses..... 3,700	700	850	1,000	1,150
\$37,000	\$7,000	\$8,500	\$10,000	\$11,500

Administrative Expenses Budget--Cash Requirements
For the Year Ended December 31, 20__

Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Estimated adm. expenses...\$37,000	\$7,000	\$8,500	\$10,000	\$11,500
Less: bad debt expenses... 3,700	700	850	1,000	1,150
Cash requirements.....\$33,300	\$6,500	\$7,650	\$ 9,000	\$10,350

Now, from the information budgeted so far, you can proceed to prepare the budget income statement. Assume you plan to borrow \$10,000 at the end of the first quarter. Although payable at maturity of the note, the interest appears in the last three quarters of the year. The statement will resemble the following:

Budgeted Income Statement For the Year Ended December 31, 20__

Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Sales.....\$370,000	\$70,000	\$85,000	\$100,000	\$115,000
Cost of goods sold..... 185,000	35,000	42,500	50,000	57,500
Gross Margin.....\$185,000	\$35,000	\$42,500	\$ 50,000	\$ 57,500
Operating expenses:				
Selling.....\$ 92,500	\$17,500	\$21,250	\$ 25,000	\$ 28,750
Administrative..... 37,000	7,000	8,500	\$ 10,000	\$ 11,500
Total.....\$129,500	\$24,500	\$29,750	\$ 35,000	\$ 40,250
Net income				
from operations.....\$ 55,500	\$10,500	\$12,750	\$ 15,000	\$ 17,250
Interest expense..... 450		150	150	150
Net income before				
Income taxes.....\$ 55,050	\$10,500	\$12,600	\$ 14,850	\$ 17,100
Federal income tax..... 27,525	5,250	6,300	7,425	8,550
Net income.....\$ 27,525	\$ 5,250	\$ 6,300	\$ 7,425	\$ 8,550

Estimating that 90 percent of your account sales is collected in the quarter in which they are made, that 9 percent is collected in the quarter following the quarter in which the sales were made, and that 1 percent of account sales is uncollectible, your accounts receivable budget of collections would look like this:

Budget of Collections of Accounts Receivable For the Year Ended December 31, 20__

	Total (net)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
4th Quarter Sales 19-0...	\$ 6,000	\$ 6,000			
1st Quarter Sales 19-1...	69,300	63,000	\$ 6,300		
2nd Quarter Sales 19-1...	84,150		76,500	\$ 7,650	
3rd Quarter Sales 19-1...	99,000			90,000	\$ 9,000
4th Quarter Sales 19-1...	103,500				103,500
	\$361,950	\$69,000	\$82,800	\$97,650	\$112,500

Going back to the sales budget in units, now prepare a production budget in units. Assume you have 2,000 units in the opening inventory and want to have on hand at the end of each quarter the following quantities: 1st quarter, 3,000 units; 2nd quarter, 3,500 units; 3rd quarter, 4,000 units; and 4th quarter, 4,500 units.

Production Budget--Units For the Year Ended December 31, 20__

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Sales requirements.....	7,000	8,500	10,000	11,500
Add: ending inventory requirements.....	3,000	3,500	4,000	4,500
Total requirements.....	10,000	12,500	14,000	16,000
Less: beginning inventory.....	2,000	3,000	3,500	4,000
Production requirements.....	8,000	9,000	10,500	112,000

Next, based on the production budget, prepare a budget to show the purchases needed during each of the four quarters. Expressed in terms of dollars, you do this by taking the production and inventory fires and multiplying them by the cost of material (previously estimated at \$1.50 per unit). You could prepare a similar budget expressed in units.

Budget of Direct Materials Purchases For the Year Ended December 31, 20__

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Required for production.....	\$12,000	\$13,500	\$15,750	\$18,000
Required for ending inventory..	4,500	52,250	6,000	6,750
Total.....	\$16,500	\$18,750	\$21,750	\$24,750
Less: beginning inventory.....	3,000	4,500	5,250	6,000
Required purchases.....	\$13,500	\$14,250	\$16,500	\$18,750

Now suppose you pay 50 percent of your accounts in the quarter of the purchase and 50 percent in the following quarter. Carryover payables from last year were \$5,000. Further, you always take the purchase discounts as a matter of good business policy. Since net purchases (less discount) were figured into the \$1.50 cost estimate, purchase discounts do not appear in the budgets. Thus your payment on purchases budget will come out like this:

Payment on Purchases Budget For the Year Ended December 31, 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
4th Quarter Sales 19-0...	\$ 5,000	\$ 5,000			
1st Quarter Sales 19-1...	13,500	6,750	\$ 6,750		
2nd Quarter Sales 19-1...	14,250			7,125	\$ 7,125
3rd Quarter Sales 19-1...	16,500			8,250	\$ 8,250
4th Quarter Sales 19-1...	9,375				9,375
Payments by Quarters	\$58,625	\$11,750	\$13,875	\$15,375	\$17,625

Taking the data for quantities produced from the production budget in units, calculate the direct labor requirements on the basis of units to be produced. (The number and cost of labor hours necessary to produce a given quantity can be set forth in supplemental schedules.)

Direct Labor Budget--Cash Requirements For the Year Ended December 31, 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Quantity.....	39,500	8,000	9,000	10,500	12,000
Direct labor cost.....	\$98,750	\$20,000	\$22,500	\$26,250	\$30,000

Now outline the items that comprise your factory overhead, and prepare a budget like the following:

Manufacturing Overhead Budget For the Year Ended December 31, 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Heat and power.....	\$10,000	\$1,000	\$2,500	\$ 3,000	\$ 3,500
Factory supplies.....	5,300	1,000	1,500	1,800	1,000
Property taxes.....	2,000	500	500	500	500
Depreciation.....	2,800	700	700	700	700
Rent.....	8,000	2,000	2,000	2,000	2,000
Superintendent.....	9,400	2,800	1,800	2,500	4,300
	\$39,500	\$8,000	\$9,000	\$10,500	\$12,000

Figure the cash payments for manufacturing overhead by subtracting depreciation, which requires no cash outlay, from the totals above, and you will have the following breakdown:

Manufacturing Overhead Budget--Cash Requirements
For the Year Ended December 31, 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Productions--units.....	39,500	8,000	9,000	10,500	12,000
Mfg. overhead expenses..	\$39,500	\$8,000	\$9,000	\$10,500	\$12,000
Less: depreciation.....	2,800	700	700	700	700
Cash requirements.....	\$36,700	\$7,300	\$8,300	\$ 9,800	\$11,300

Now comes the all important cash budget. You put it together by using the Collection of Accounts Receivable Budget; Selling Expenses Budget-Cash Requirements; Administrative Expenses Budget--Cash Requirements; Payment of Purchases Budget; Direct Labor Budget--Cash Requirements; and Manufacturing Budget--Cash Requirements.

Take \$15,000 as the beginning balance, and assume that dividends of \$20,000 are to be paid in the fourth quarter.

Cash Budget For the Year Ended December 31, 20__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Beginning cash balance	\$ 15,000	\$15,000	\$ 3,850	\$ 13,300	\$ 25,750
Cash collections	361,950	69,000	82,800	97,650	112,500
Total	\$376,950	\$84,000	\$86,650	\$110,950	\$138,250
Cash payments					
Purchases	\$ 58,625	\$11,750	\$13,875	\$ 15,375	\$ 17,625
Direct labor	98,750	20,000	22,500	26,250	30,000
Mfg. overhead	38,700	7,300	8,300	9,800	11,300
Selling expense	91,600	17,275	21,025	24,775	28,525
Adm. expenses	33,300	6,300	7,650	9,000	10,350
Federal income tax	27,525	27,525			
Dividends	20,000				20,000
Interest expenses	450				450
Loan repayment	10,000				10,000
Total	\$376,950	\$90,150	\$73,350	\$ 85,200	\$128,250
Cash deficiency		(\$ 6,150)			
Bad loan received	10,000	10,000			
Ending cash balance	\$ 10,000	\$ 3,850	\$13,300	\$ 25,750	\$ 10,000

Now you are ready to prepare a budget balance sheet. Take the account balances of last year and combine them with the transactions reflected in the various budgets you have compiled. You will come out with a sheet resembling this:

Budgeted Balance Sheet December 31, 20__

Assets

	20__	20__
Current assets:		
Cash	\$ 10,000	\$ 15,000
Accounts receivable	11,500	6,666
Less: allowance for doubtful accounts	(1,150)	(666)
Inventory:		
Raw materials	6,750	3,000
Finished goods	22,500	10,000
Total current assets	\$ 49,600	34,000
Fixed assets:		
Land	\$ 50,000	\$ 50,000
Building	148,000	148,000
Less: allowance for depreciation	(37,000)	(33,000)
Total fixed assets	\$161,100	\$164,700
Total assets	\$210,600	\$198,700

Liabilities and Shareholders' Equity

Current liabilities:		
Account payable	\$ 9,375	\$ 5,000
Shareholders' equity:		
Capital stock (10,000 shares; \$10 par value)	\$100,000	\$110,000
Retained earnings	101,225	93,700
	\$201,225	\$193,700
Total liabilities and shareholders' equity	\$210,600	\$198,700

In order to make the most effective use of your budgets to plan profits, you will want to establish reporting devices. Throughout the time span you have set, you need periodic reports and reviews on both efforts and accomplishments. These let you know whether your budget plan is being attained and help you keep control throughout the process. It is through comparing actual performance with budgeted projections that you maintain control of the operations.

Your company should be structured along functional lines, with well identified areas of responsibility and authority. Then, depending upon the size of your company, the budget reports can be prepared to correspond with the organizational structure of the company.

Two typical budget reports are shown below to demonstrate various forms these reports may take.

Report of Actual and Budgeted Sales For the Year Ended December 31, 20____

	Actual sales	Budgeted sales	Variations from budget (under)	
			Quarterly	Cumulative
1st Quarter	\$	\$	\$	\$
2nd Quarter				
3rd Quarter				
4th Quarter				

Budgeted Report on Selling Expenses For the Year Ended December 31, 20____

Budget This Month	Actual This Month	Variation This Month	Budget Year to Date	Actual Year to Date	Variations Year to Date	Remarks
\$	\$	\$	\$	\$	\$	

Remember, the Cash Flow Statement used as the business's Budget allows the owner/manager to anticipate problems rather than react to them after they occur. It permits comparison of actual receipts and disbursements against projections to identify errors in the forecast. If cash flow is analyzed monthly, the manager can correct the cause of the error before it harms profitability.

VI. Pricing Policy

Identifying the actual cost of doing business requires careful and accurate analysis. No one is expected to calculate the cost of doing business with complete accuracy. However, failure to calculate all actual costs properly to ensure an adequate profit margin is a frequent and often overlooked cause of business failure.

Establishing Selling Prices

The costs of raw materials, labor, indirect overhead, and research and development must be carefully studied before setting the selling price of items offered by your business. These factors must be regularly re-evaluated, as costs fluctuate.

Regardless of the strategies employed to maximize profitability, the method of costing products offered for resale is basic. It involves four major categories:

- * Direct Material Costs
- * Direct Labor Costs
- * Overhead Expenses
- * Profit Desired

Combining these factors allows you to calculate an item's minimum sales price, which is described below:

1. Calculate your Direct Material Costs. Direct material costs are the total cost of all raw materials used to produce the item for sale. Divide this total cost by the number of items produced from these raw materials to derive the Total Direct Materials Cost Per Item.

2. Calculate your Direct Labor Costs. Direct labor costs are the wages paid to employees to produce the item. Divide this total direct labor cost by the total number of items produced to get the Total Direct Labor Cost Per Item.

3. Calculate your Total Overhead Expenses. Overhead expenses include rent, gas and electricity, telephone, packing and shipping, delivery and freight charges, cleaning expenses, insurance, office supplies, postage, repairs and maintenance, and the manager's salary. In other words, all operating expenses incurred during the same time period that you used for calculating the costs above (one year, one quarter, or one month). Divide the Total Overhead Expense by the number of items produced for sale during that same time period to get the Total Overhead Expense Per Item.

4. Calculate Total Cost Per Item. Add the Total Direct Material Cost Per Item, the Total Direct Labor Cost Per Item, and the Total Overhead Expense Per Item to derive the Total Cost Per Item.

5. Calculate the Profit Per Item. Now, calculate the profit you determine appropriate for each category of item offered for sale based on the sales and profit strategy you have set for your business.

6. Calculate the Total Price Per Item. Add the Profit Figure Per Item to the Total Cost Per Item.

A Pricing Example

You produce skirts that take 1 1/2 yards of fabric per skirt, and you can manufacture three skirts per day. The fabric costs \$2.00 per yard. The normal work week is five days. If you complete three skirts per day, your week's production is 15 skirts.

1. Calculate Direct Materials Cost

Materials	Cost
Fabric for 1 week's production:	
15 skirts x 1 1/2 yds. each = 22 1/2 yds. x \$2 per yd.	\$45.00
Linings, interfacings, etc.:	
\$.50 per skirt x 15 skirts	7.50
Zippers, buttons, snaps:	
\$.50 per skirt x 15 skirts	7.50
Belts, ornaments, etc.:	
\$.75 per skirt x 15 skirts	11.25
Notions, seam binding, etc.:	
1 week's supply	5.00
Total Direct Materials Cost:	\$76.25 per week

Total Direct Materials Cost per week = \$76.25

 15 skirts per week Direct Materials Cost per skirt

2. Calculate Direct Labor Costs

Wages paid to employees = \$100.00 per week

Total Direct Labor Cost per week = \$6.67	Direct Labor Cost
-----	per skirt
15 skirts	

3. Calculate Overhead Expenses Per Month

Overhead Expenses	Monthly Expenses
Owner's Salary	\$400.00
Rent	100.00
Electricity	24.00
Telephone	12.00
Insurance	15.00
Cleaning	20.00
Packing Materials and Supplies	15.00
Delivery and Freight	20.00
Office Supplies, Postage	10.00
Repairs and Maintenance	15.00
Payroll Taxes	5.00
Total Monthly Overhead Expenses:	\$636.00

15 skirts per week x 4 weeks in one month = 60 skirts per month.

Total Monthly Overhead Expenses = \$10.60	Overhead Cost
-----	per skirt
60 skirts per month	

4. Calculate the Total Cost per Skirt by adding the total individual costs per skirt calculated in the three preceding steps.

Total Direct Material Cost per Skirt	\$ 5.08
Total Direct Labor Cost per Skirt	6.67
Total Overhead Expense per Skirt	10.60
TOTAL COST PER SKIRT	\$22.35

5. Assume you want to make a profit of \$5.00 per skirt.

6. Calculate the Total Price Per Item:

Total Cost per Skirt	\$22.35
Total Profit per Skirt	5.00
Total Selling Price Per Skirt	\$27.35

The Retailer's Mark-Up

A word of caution is in order regarding the popular but misunderstood pricing method known as retailers mark-up. Retail mark-up means the amount added to the price of an item to arrive at the retail sales price, either in dollars or as a percentage of the cost.

For example, if a single item costing \$8.00 is sold for \$12.00 it carries a mark-up of \$4.00 or 50 percent. If a group of items costing \$6,000 is offered for \$10,000, the mark-up is \$4,000 or 66 2/3 percent. While in these illustrations the mark-up percentage appears generally to equal the gross margin percentages, the mark-up is not the same as the gross margin. Adding

mark-up to the price merely to simplify pricing will almost always adversely affect profitability.

To demonstrate, assume a manager determines from past records that the business's operating expenses average 29 percent of sales. She decides that she is entitled to a profit of 3 percent. So she prices her goods at a 32 percent gross margin, in order to earn a 3 percent profit after all operating expenses are paid. What she fails to realize, however, is that once the goods are displayed, some may be lost through pilferage. Others may have to be marked down later in order to sell them, or employees may purchase some of them at a discount. Therefore, the total reductions (mark-downs, shortages, discounts) in the sales price realized from selling all the inventory actually add up to an annual average of six percent of total sales. To correctly calculate the necessary mark-up required to yield a 32 percent gross margin, these reductions to inventory must be anticipated and added into its selling price. Using the formula:

$$\begin{array}{r} \text{Initial Mark-up} = \text{Desired Gross Margin} + \text{Retail Reductions} \\ \text{-----} \\ \text{100 Percent} + \text{Retail Reductions} \\ \\ \text{32 percent} + \text{6 percent} = \text{38 percent} = \text{35.85 percent} \\ \text{-----} \quad \text{-----} \\ \text{100 percent} + \text{6 percent} \quad \text{106 percent} \end{array}$$

To obtain the desired gross margin of 32 percent, therefore, the retailer must initially mark up his inventory by nearly 36 percent.

Pricing Policies and Profitability Goals

Break-Even Analysis, discussed in Chapter IV, and Return on Investment, described in Chapter III, should be reviewed at this time. Remember, all costs (direct and indirect), the break-even point, desired profit, and the methods of calculating sales price from these factors must be thoroughly studied when you establish pricing policies and profitability goals. They should be understood before you offer items for sale because an omission or error in these calculations could make the difference between success and failure.

Selling Strategy

Proper product pricing is only one facet of overall planning for profitability. A second major factor to be determined once costs, break-even point, and profitability goals have been analyzed, is the selling strategy. Three sales planning approaches are used (often concurrently) by businesses to develop final pricing policies, as they strive to compete successfully.

In the first, employed as a short-term strategy in the earliest stages of a business, the owner/manager sells products at such low prices that the business only breaks even (no profit), while trying to attract future steady customers. As volume grows, the owner/manager gradually builds in the profit margin necessary to achieve the targeted Return on Investment.

"Loss leaders" are a second strategy practiced in both developing and mature business. While a few items are sold at a loss, most goods are priced for healthy profits. The hope is that while customers are in the store to purchase the low-price items, they will also buy enough other goods to make the seller's overall profitability higher than if he had not used "come-ons." The seller wants to maximize total profit and can sacrifice profit on a few items to achieve that goal.

The third strategy recognizes that maximum profit does not result only from selling goods at relatively high profit margins. The relationship of volume, price, cost of merchandise, and operational expenses determines profitability.

Price increases may result in fewer sales and decreased profits. Reductions in prices, if sales volume is substantially increased, may produce satisfactory profits.

There is no arbitrary rule about this. It is perfectly possible for two stores, with different pricing structures to exist side by side and both be successful. It is the owner/manager's responsibility to identify and understand the market factors that affect his or her unique business circumstances. The level of service (delivery, availability of credit, store hours, product advice, and the like) may permit a business to charge higher prices in order to cover the costs of such services. Location, too, often permits a business to charge more, since customers are often willing to pay a premium for convenience.

The point is that many considerations go into setting selling prices. Some small businesses do not seek to compete on price at all, finding an un- or under-occupied market niche, which can be a more certain path to success. What is important is that all factors that affect pricing must be recognized and analyzed for their costs as well as their benefits.

VII. Forecasting and Obtaining Capital

Forecasting the need for capital, whether debt or equity, has already been discussed in Chapter V. This chapter looks at the types and uses of external capital and the usual sources of such capital.

Types and Sources of Capital

The capital to finance a business has two major forms: debt and equity. Creditor money (debt) comes from trade credit, loans made by financial institutions, leasing companies, and customers who have made prepayments on larger--frequently manufactured--orders. Equity is money received by the company in exchange for some portion of ownership. Sources include the entrepreneur's own money; money from family, friends, or other non-professional investors; or money from venture capitalists, Small Business Investment Companies (SBICs), and Minority Enterprise Small Business Investment Companies (MESBICs) both funded by the SBA.

Debt capital, depending upon its sources (e.g., trade, bank, leasing company, mortgage company) comes into the business for short or intermediate periods. Owner or equity capital remains in the company for the life of the business (unless replaced by other equity) and is repaid only when and if there is a surplus at liquidation of the business--after all creditors are repaid.

Acquiring such funds depends entirely on the business's ability to repay with interest (debt) or appreciation (equity). Financial performance (reflected in the Financial Statements discussed in Chapter II) and realistic, thorough management planning and control (shown by Pro Forms and Cash Flow Budgets), are the determining factors in whether or not a business can attract the debt and equity funding it needs to operate and expand.

Business capital can be further classified as equity capital, working capital, and growth capital. Equity capital is the cornerstone of the financial structure of any company. As you will recall from Chapter II, equity is technically the part of the Balance Sheet reflecting the ownership of the company. It represents the total value of the business, all other financing being debt that must be repaid. Usually, you cannot get equity capital--at least not during the early stages of business growth.

Working capital is required to meet the continuing operational needs of the business, such as "carrying" accounts receivable purchasing inventory, and meeting the payroll. In most businesses, these needs vary during the year,

depending on activities (inventory build-up, seasonal hiring or layoffs, etc.) during the business cycle.

Growth capital is not directly related to cyclical aspects of the business. Growth capital is required when the business is expanding or being altered in some significant and costly way that is expected to result in higher and increased cash flow. Lenders of growth capital frequently depend on anticipated increased profit for repayment over an extended period of time, rather than expecting to be repaid from seasonal increases in liquidity as is the case of working capital lenders.

Every growing business needs all three types: equity, working, and growth capital. You should not expect a single financing program maintained for a short period of time to eliminate future needs for additional capital.

As lenders and investors analyze the requirements of your business, they will distinguish between the three types of capital in the following way:

1) fluctuating needs (working capital); 2) needs to be repaid with profits over a period of a few years (growth capital); and 3) permanent needs (equity capital).

If you are asking for a working capital loan, you will be expected to show how the loan can be repaid through cash (liquidity) during the business's next full operating cycle, generally a one year cycle. If you seek growth capital, you will be expected to show how the capital will be used to increase your business enough to be able to repay the loan within several years (usually not more than seven). If you seek equity capital, it must be raised from investors who will take the risk for dividend returns or capital gains, or a specific share of the business.

Borrowing Working Capital

Chapter II defined working capital as the difference between current assets and current liabilities. To the extent that a business does not generate enough money to pay trade debt as it comes due, this cash must be borrowed.

Commercial banks obviously are the largest source of such loans, which have the following characteristics: 1) The loans are short-term but renewable; 2) they may fluctuate according to seasonal needs or follow a fixed schedule of repayment (amortization); 3) they require periodic full repayment ("clean up"); 4) they are granted primarily only when the ratio of net current assets comfortably exceeds net current liabilities; and 5) they are sometimes unsecured but more often secured by current assets (e.g., accounts receivable and inventory). Advances can usually be obtained for as much as 70 to 80 percent of quality (likely to be paid) receivables and to 40 to 50 percent of inventory. Banks grant unsecured credit only when they feel the general liquidity and overall financial strength of a business provide assurance for repayment of the loan.

You may be able to predict a specific interval, say three to five months, for which you need financing. A bank may then agree to issue credit for a specific term. Most likely, you will need working capital to finance outflow peaks in your business cycle. Working capital then supplements equity. Most working capital credits are established on a one-year basis.

Although most unsecured loans fall into the one-year line of credit category, another frequently used type, the amortizing loan, calls for a fixed program of reduction, usually on a monthly or quarterly basis. For such loans your bank is likely to agree to terms longer than a year, as long as you continue to meet the principal reduction schedule.

It is important to note that while a loan from a bank for working capital can be negotiated only for a relatively short term, satisfactory performance can allow the arrangement to be continued indefinitely.

Most banks will expect you to pay off your loans once a year (particularly if they are unsecured) in perhaps 30 or 60 days. This is known as "the annual clean up," and it should occur when the business has the greatest liquidity. This debt reduction normally follows a seasonal sales peak when inventories have been reduced and most receivables have been collected.

You may discover that it becomes progressively more difficult to repay debt or "clean up" within the specified time. This difficulty usually occurs because: 1) Your business is growing and its current activity represents a considerable increase over the corresponding period of the previous year; 2) you have increased your short-term capital requirement because of new promotional programs or additional operations; or 3) you are experiencing a temporary reduction in profitability and cash flow.

Frequently, such a condition justifies obtaining both working capital and amortizing loans. For example, you might try to arrange a combination of a \$15,000 open line of credit to handle peak financial requirements during the business cycle and \$20,000 in amortizing loans to be repaid at, say \$4,000 per quarter. In appraising such a request, a commercial bank will insist on justification based on past experience and future projections. The bank will want to know: How the \$15,000 line of credit will be self-liquidating during the year (with ample room for the annual clean up); and how your business will produce increased profits and resulting cash flow to meet the schedule of amortization on the \$20,000 portion in spite of increasing your business's interest expense.

Borrowing Growth Capital

Lenders expect working capital loans to be repaid through cash generated in the short-term operations of the business, such as, selling goods or services and collecting receivables. Liquidity rather than overall profitability supports such borrowing programs. Growth capital loans are usually scheduled to be repaid over longer periods with profits from business activities extending several years into the future. Growth capital loans are, therefore secured by collateral such as machinery and equipment, fixed assets which guarantee that lenders will recover their money should the business be unable to make repayment.

For a growth capital loan you will need to demonstrate that the growth capital will be used to increase your cash flow through increased sales, cost savings, and/or more efficient production. Although your building, equipment, or machinery will probably be your collateral for growth capital funds, you will also be able to use them for general business purposes, so long as the activity you use them for promises success. Even if you borrow only to acquire a single piece of new equipment, the lender is likely to insist that all your machinery and equipment be pledged.

Instead of bank financing a particular piece of new equipment, it may be possible to arrange a lease. You will not actually own the equipment, but you will have exclusive use of it over a specified period. Such an arrangement usually has tax advantages. It lets you use funds that would be tied up in the equipment, if you had purchased it. It also affords the opportunity to make sure the equipment meets your needs before you purchase it.

Major equipment may also be purchased on a time payment plan, sometimes called a Conditional Sales Purchase. Ownership of the property is retained by the seller until the buyer has made all the payments required by the contract. (Remember, however, that time payment purchases usually require substantial

down payments and even leases require cash advances for several months of lease payments.)

Long-term growth capital loans for more than five but less than fifteen years are also obtainable. Real estate financing with repayment over many years on an established schedule is the best example. The loan is secured by the land and/or buildings the money was used to buy. Most businesses are best financed by a combination of these various credit arrangements.

When you go to a bank to request a loan, you must be prepared to present your company's case persuasively. You should bring your financial plan consisting of a Cash Budget for the next twelve months, Pro Forma Balance Sheets, and Income Statements for the next three to five years. You should be able to explain and amplify these statements and the underlying assumptions on which the figures are based. Obviously, your assumptions must be convincing and your projections supportable. Finally, many banks prefer statements audited by an outside accountant with the accountant's signed opinion that the statements were prepared in accordance with generally accepted accounting principles and that they fairly present the financial condition of your business.

If borrowing growth capital is necessary and no private conventional source can be found, the U.S. Small Business Administration (SBA) may be able to guarantee up to 90 percent of a local bank loan. By law, SBA cannot consider a loan application without evidence that the loan could not be obtained elsewhere on reasonable terms without SBA assistance. Even for such guaranteed loans, however, the borrower must demonstrate the ability to repay.

Borrowing Permanent Equity Capital

Permanent capital sometimes comes from sources other than the business owner/manager. Considered ownership contributions, they are different from "stockholders equity" in the traditional sense of the phrase. Small Business Investment Companies (SBIC's) licensed and financed by the Small Business Administration are authorized to provide venture capital to small business concerns. This capital may be in the form of secured and/or unsecured loans or debt securities represented by common and preferred stock.

Venture capital, another source of equity capital, is extremely difficult to define; however, it is high risk capital offered with the principal objective of earning capital gains for the investor. While venture capitalists are usually prepared to wait longer than the average investor for a profitable return, they usually expect in excess of 15 percent return on their investment. Often they expect to take an active part in determining the objectives of the business. These investors may also assist the small business owner/manager by providing experienced guidance in marketing, product ideas, and additional financing alternatives as the business develops. Even though turning to venture capital may create more bosses, their advice could be as valuable as the money they lend. Be aware, however, that venture capitalists are looking for businesses with real potential for growth and for future sales in the millions of dollars.

Figure 7-1
Financing Sources for Your Business

Equity (Sell part of company)

- * Family, friends, and other non-professional investors
- * Venture Capitalists
- * Small Business Investment Companies (SBICs and MESBICs)

Personal Loans

- * Banks
 - Unsecured loans (rare)
 - Loans secured by:
 - Real Estate
 - Stocks and Bonds
- * Finance Companies
 - Loans secured by:
 - Real Estate
 - Personal Assets
- * Credit Unions
 - Unsecured "signature" loans
 - Loans secured by:
 - Real Estate (some credit unions)
 - Personal Assets
- * Savings and Loan Associations
 - Unsecured loans (rare)
 - Loans secured by Real Estate
- * Mortgage Brokers and Private Investors
 - Loans secured by Real Estate
- * Life Insurance Companies
 - Policy loans (borrow against cash value)

Business Loans

Loans

- * Banks (short-term)
 - Unsecured loans (for established, financially sound companies only)
 - Loans secured by:
 - Accounts Receivable
 - Inventory
 - Equipment
- * Banks (long-term)
 - Loans secured by:
 - Real Estate
 - Loans guaranteed by:
 - Small Business Administration (SBA)
 - Farmers Home Administration (FmHA)
- * Commercial Finance Companies
 - Loans secured by:
 - Real Estate
 - Equipment
 - Inventory
 - Accounts Receivable
- * Life Insurance Companies
 - Loans secured by commercial Real Estate (worth at least \$150,000)
- * Small Business Administration (SBA)
 - Loans secured by:
 - All available business assets
 - All available personal assets
- * Suppliers
 - Trade Credit
- * Customers

- Prepayment on orders

Leasing

- * Banks
- * Leasing Companies
 - Loans secured by:
 - Equipment
- Sales of Receivables (called "factoring")

(Source: The Business Store, Santa Rosa, California.)

Applying for Capital

Below is the minimum information you must make available to lenders and investors:

1. Discussion of the Business
 - * Name, address, and telephone number.
 - * Type of business you are in now or want to expand or start.
2. Amount of Money You Need to Borrow
 - * Ask for all you will need. Don't ask for a part of the total and think you can come back for more later. This could indicate to the lender that you are a poor planner.
3. How You Will Use the Money
 - * List each way the borrowed money will be used.
 - * Itemize the amount of money required for each purpose.
4. Proposed Terms of the Loan
 - * Include a payback schedule. Even though the lender has the final say in setting the terms of the loan, if you suggest terms, you will retain a negotiating position.
5. Financial Support Documents
 - * Show where the money will come from to repay the loan through the following projected statements:
 - Profit and Loss Statements (one year for working capital loan requests and three to five years for growth capital requests)
 - Cash Flow Statements (one year for working capital loan requests and three to five years for growth capital requests)
6. Financial History of the Business
 - * Include the following financial statements for the last three years:
 - Balance Sheet
 - Profit and Loss Statement
 - Accounts Receivable and Accounts Payable Listings and Agings
7. Personal Financial Statement of the Owner(s)
 - * Personal Assets and Liabilities
 - * Resume(s)
8. Other Useful information Includes
 - * Letters of Intent from Prospective Customers
 - * Leases or Buy/Sell Agreements Affecting Your Business
 - * Reference Letters

Although it is not required, it is useful to calculate the ratios described in Chapter III for your business over the past three years. Use this information to prove the strong financial health and good trends in your business's

development and to demonstrate that you use such management tools to plan and control your business's growth.

VIII. Financial Management Planning

Studies overwhelmingly identify bad management as the leading cause of business failure. Bad management translates to poor planning by management.

All too often, the owner is so caught up in the day-to-day tasks of getting the product out the door and struggling to collect receivables to meet the payroll that he or she does not plan. There never seems to be time to prepare Pro Formas or Budgets. Often new managers understand their products but not the financial statements or the bookkeeping records, which they feel are for the benefit of the IRS or the bank. Such overburdened owner/managers can scarcely identify what will affect their businesses next week, let alone over the coming months and years. But, you may ask, "What should I do? How can I, as a small business owner/manager, avoid getting bogged down? How can I ensure success?"

Success may be ensured only by focusing on all factors affecting a business's performance. Focusing on planning is essential to survival.

Short-term planning is generally concerned with profit planning or budgeting. Long-term planning is generally strategic, setting goals for sales growth and profitability over a minimum of three to five years.

The tools for short- and long-term plans have been explained in the previous chapters: Pro Forma Income Statements, Cash Flow Statements or Budgets, Ratio Analysis, and pricing considerations. The business's short-term plan should be prepared on a monthly basis for a year into the future, employing the Pro Forma Income Statement and the Cash Flow Budget.

Long-Term Planning

The long-term or strategic plan focuses on Pro Forma Statements of Income prepared for annual periods three to five years into the future. You may be asking yourself, "How can I possibly predict what will affect my business that far into the future?" Granted, it's hard to imagine all the variables that will affect your business in the next year, let alone the next three to five years. The key, however, is control--control of your business's future course of expansion through the use of the financial tools explained in the preceding chapters.

First determine a rate of growth that is desirable and reasonably attainable. Then employ Pro Formas and Cash Flow Budgets to calculate the capital required to finance the inventory, plant, equipment, and personnel needs necessary to attain that growth in sales volume. The business owner/manager must anticipate capital needs in time to make satisfactory arrangements for outside funds if internally generated funds from retained earnings are insufficient.

Growth can be funded in only two ways: with profits or by borrowing. If expansion outstrips the capital available to support higher levels of accounts receivable, inventory, fixed assets, and operating expenses, a business's development will be slowed or stopped entirely by its failure to meet debts as they become payable. Such insolvency will result in the business's assets being liquidated to meet the demands of the creditors. The only way to avoid this "outstripping of capital" is by planning to control growth. Growth must be understood to be controlled. This understanding requires knowledge of past financial performance and of the future requirements of the business.

These needs must be forecast in writing--using the Pro Forma Income Statement in particular--for three to five years in the future. After projecting

reasonable sales volumes and profitability, use the Cash Flow Budget to determine (on a quarterly basis for the next three to five years) how these projected sales volumes translate into the flow of cash in and out of the business during normal operations. Where additional inventory, equipment, or other physical assets are necessary to support the sales forecast you must determine whether or not the business will generate enough profit to sustain the growth forecast.

Often, businesses simply grow too rapidly for internally generated cash to sufficiently support the growth. If profits are inadequate to carry the growth forecast, the owner/manager must either make arrangements for working growth capital to be borrowed, or slow growth to allow internal cash to "catch up" and keep pace with the expansion. Because arranging financing and obtaining additional equity capital takes time, this need must be anticipated well in advance to avoid business interruption.

To develop effective long-term plans, you should do the following steps:

1. Determine your personal objectives and how they affect your willingness and ability to pursue financial goals for your business. This consideration, often overlooked, will help you determine whether or not your business goals fit your personal plans. For example, suppose you hope to become a millionaire by age 45 through your business but your long-term strategic plan reveals that only modest sales growth and very slim profit margins on that volume are attainable in your industry. You must either adjust your personal goals or get into a different business. Long-range planning enables you to be realistic about the future of your personal and business expectations.

2. Set goals and objectives for the company (growth rates, return on investment direction as the business expands and matures). Express these goals in specific numbers, for example, sales growth of 10 percent a year, increases in gross and net profit margins of 2 to 3 percent a year, a return on investment of not less than 9 to 10 percent a year. Use these long-range plans to develop forecasts of sales and profitability and compare actual results from operations to these forecasts. If after these goals are established actual performance continuously falls short of target, the wise business owner will reassess both the realism of expectations and the desirability of continuing to pursue the enterprise.

3. Develop long-range plans that enable you to attain your goals and objectives. Focus on the strengths and weaknesses of your business and on internal and external factors that will affect the accomplishment of your goals. Develop strategies based upon careful analysis of all relevant factors (pricing strategies, market potential, competition, cost of borrowed and equity capital as compared to using only profits for expansions, etc.) to provide direction for the future of your business.

4. Focus on the financial, human, and physical requirements necessary to fulfill your plan by developing forecasts of sales, expenses, and retained earnings over the next three to five years.

5. Study methods of operation, product mix, new market opportunities, and other such factors to help identify ways to improve your company's productivity and profitability.

6. Revise, revise. Always use your most recent financial statements to adjust your short- and long-term plans. Compare your company's financial performance regularly with current industry data to determine how your results compare with others in your industry. Learn where your business may have performance weaknesses. Don't be afraid to modify your plans if your expectations have been either too aggressive or too conservative.

Planning is a perpetual process. It is the key to prosperity for your business.

For Further Information

U.S. Small Business Administration Publications

Business Development Booklets

The following booklets and other publications are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Write GPO to obtain SBA Order Form 115B, which lists publications and current prices.

Handbook of Small Business Finance--Small Business Management Series No. 15.

Ratio Analysis for Small Business--Small Business Management Series No. 20.

Guides for Profit Planning--Small Business Management Series No. 25.

Financial Control by Time-Absorption Analysis--Small Business Management Series No. 37.

Purchasing Management and Inventory Control for Small Business--Small Business Management Series No. 41.

Managing for Profits--Nonseries (GPO Stock No. 045-000-00206-3).

Business Development Pamphlets

Many pamphlets are available from the U.S. Small Business Administration for a small processing fee. Write SBA, P. O. Box 15434, Fort Worth, TX 76119 to request SBA Order Form 115A.

Other Sources

Retailing, Principles and Methods, Richard D. Irwin, Inc., Chicago, IL.

"Understanding Financial Statements," Small Business Reporter, 1980, Bank of America NT & SA, San Francisco, CA.