

SBA

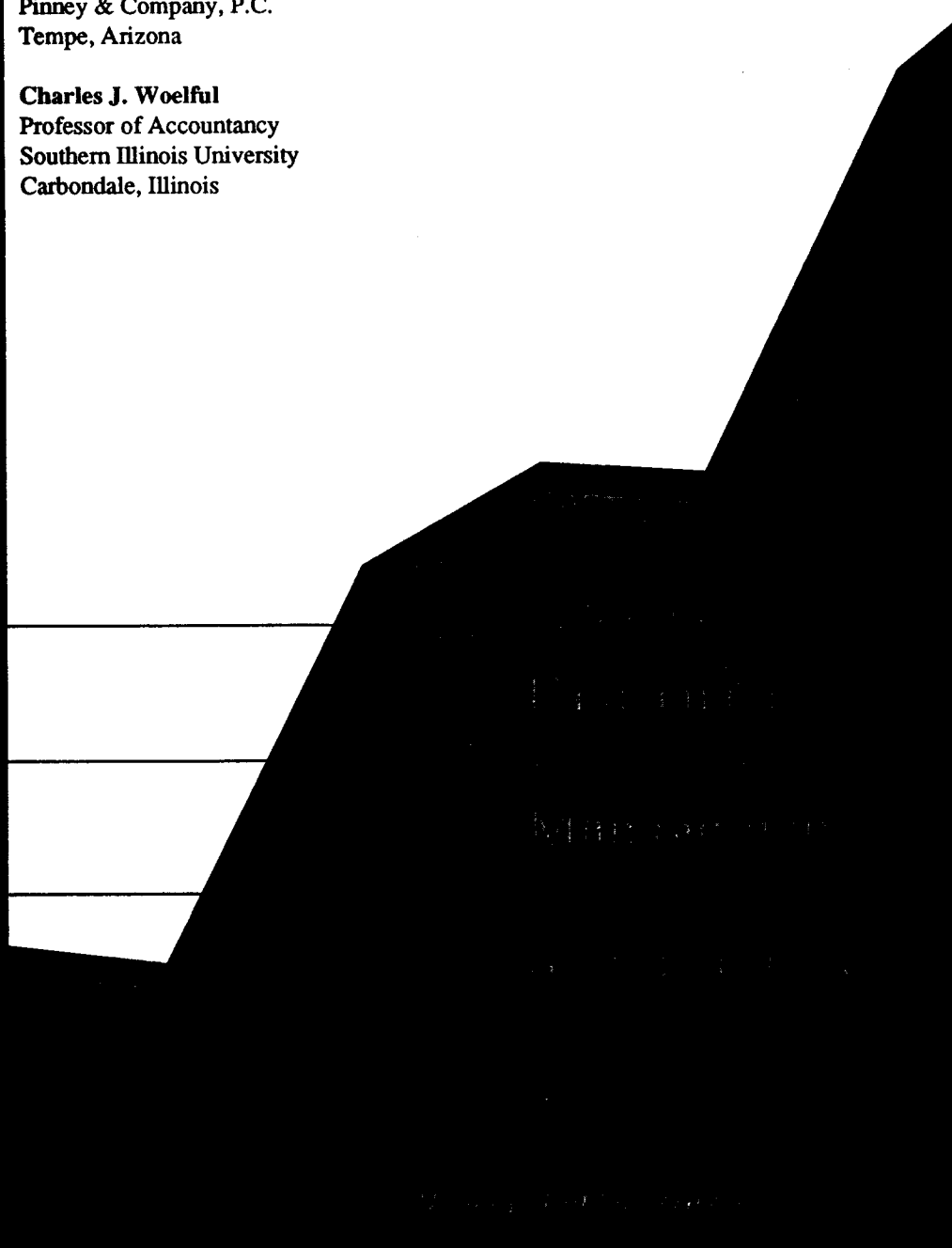
U.S. Small Business
Administration

FM-8

Budgeting for the Small Business

Constance Pinney
Certified Public Accountant
Pinney & Company, P.C.
Tempe, Arizona

Charles J. Woelful
Professor of Accountancy
Southern Illinois University
Carbondale, Illinois



**Budgeting for the Small Business replaces
Budgeting in a Small Service Firm and
Basic Budgets for Profit Planning.**

"Introduction to Budgeting," Copyright 1991, Constance Pinney. All rights reserved. No part may be reproduced, transmitted or transcribed without the permission of the author. SBA retains an irrevocable, worldwide, nonexclusive, royalty-free, unlimited license to use this copyrighted material.

While we consider the contents of this publication to be of general merit, its sponsorship by the U.S. Small Business Administration does not necessarily constitute an endorsement of the views and opinions of the authors or the products and services of the companies with which they are affiliated.

All of SBA's programs and services are extended to the public on a nondiscriminatory basis.

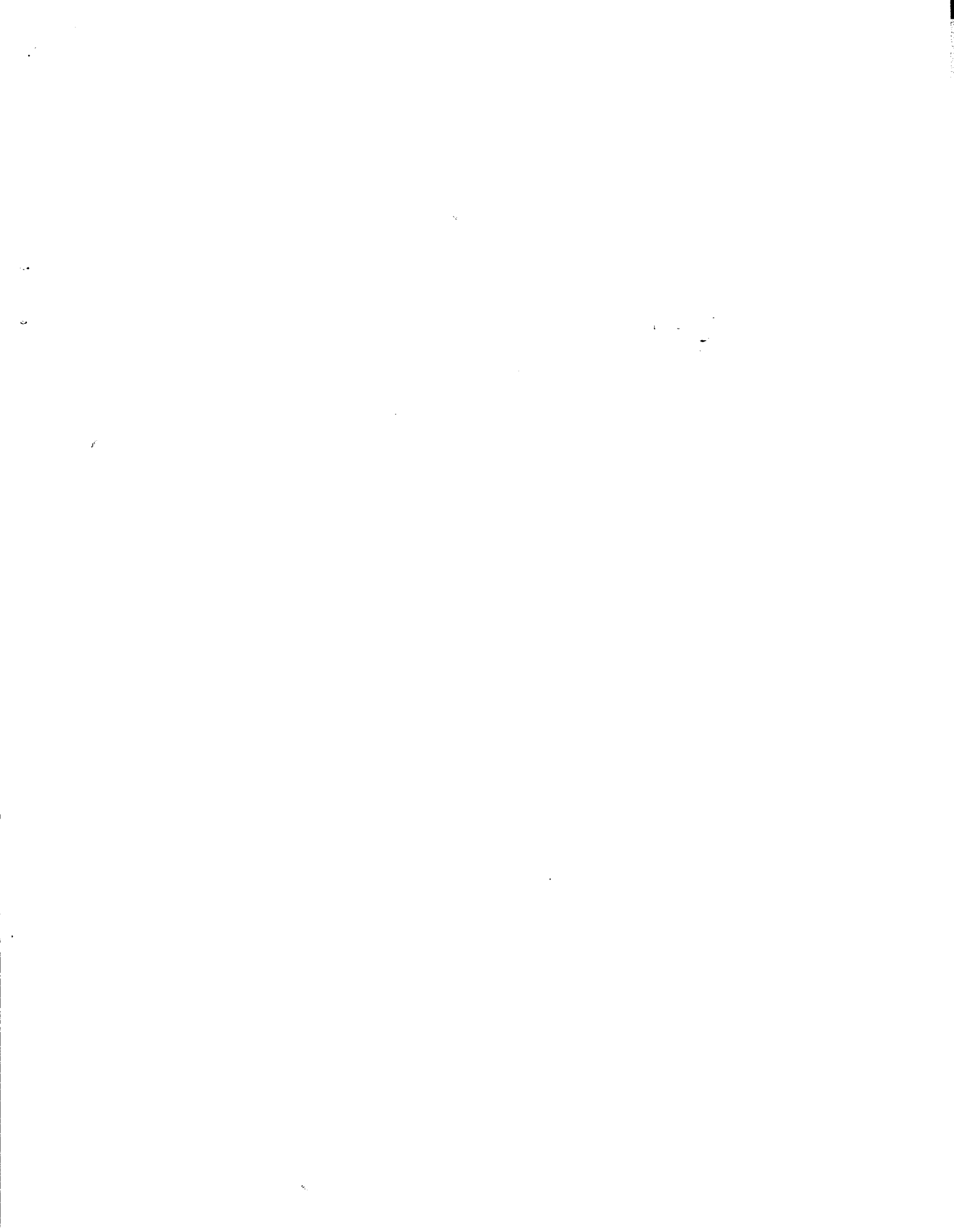
TABLE OF CONTENTS

INTRODUCTION TO BUDGETING—Constance Pinney, CPA

What Is a Budget?	1
Why Create a Budget?	1
How to Use a Budget	1
Basic Budgeting Concepts	1
Basic Budget Equation	2
Realistic Estimates	2
The Budgeting Process	3
The Master Budget	5
Summary	5

BASIC BUDGETS FOR PROFIT PLANNING—Charles J. Woelfel 6

APPENDIX: INFORMATION RESOURCES 13



What Is a Budget?

Although you might not know it, you prepare a budget each time you estimate how much cash you will have left at the end of the month after paying your bills.

A budget is a forecast of all cash sources and cash expenditures. It is organized in the same format as a financial statement, and most commonly covers a 12-month period. At the end of the year, the anticipated income and expenses developed in the budget are compared to the actual performance of the business as recorded in the financial statement.

Why Create a Budget?

A budget can greatly enhance your chances of success by helping you estimate future needs and plan profits, spending and overall cash flow. A budget allows you to perceive problems before they occur and alter your plans to prevent those problems.

This publication covers the basic concepts of budgeting and takes you through the step-by-step process of constructing a budget.

How to Use a Budget

In business, budgets help you determine how much money you have and how you will use it, and help you decide whether you have enough money to achieve your financial goals. As part of a business plan, a budget can help convince a loan officer that you know your business and have anticipated its needs.

A budget will indicate

- The cash required for necessary labor and/or materials.
- Total start-up costs.
- Day-to-day maintenance costs.
- Revenues needed to support business operations.
- Expected profit.

If your budget indicates that you need more revenue than you can earn, adjust your plans by

- Reducing expenditures (e.g., hiring fewer employees, purchasing less expensive furniture, eliminating a telephone line).

- Expanding sales (e.g., selling additional products or services, conducting an aggressive marketing campaign).
- Lowering profit expectations (usually the least desirable option).

Every business should create a budget before investing money in new equipment or other assets and before signing leases. To ensure your goals can be reached, first put all the numbers down on paper so you can adjust and rework them as many times as necessary. Mistakes are far less costly when made on paper than with actual dollars.

Basic Budgeting Concepts

The three main elements of a budget are

- Sales revenue
- Total costs
- Profit

Sales Revenue

Sales are the cornerstone of a budget. It is crucial to estimate anticipated sales as accurately as possible. Base estimates on actual past sales figures. Once you target sales, you can calculate the related expenses necessary to achieve your goals.

Total Costs

Total costs include fixed and variable costs. Estimating costs is complicated because you must identify which costs will change—and by how much—and which costs will remain unchanged. You also must consider inflation and rising prices when applicable.

Variable Costs

Variable costs are those that vary directly with sales. One example is the purchase cost of inventory. The more inventory you sell, the higher your purchasing costs; the less you sell, the lower your purchasing costs. Similarly, freight and special packaging costs will vary directly with sales; these costs will not be incurred without a sale.

For example, a store owner pays \$350,000 for supplies and sells them for \$500,000. To calculate the cost of inventory purchases as a percentage of sales, the owner divides the amount paid by the amount received in sales ($350,000 \div 500,000 = 70$ percent). This means 70 percent of sales will go to pay for the cost of inventory. If the

store owner estimates \$600,000 in sales for the next year, he or she should budget 70 percent of \$600,000, or \$420,000, for inventory purchases.

Fixed Costs

Fixed costs are those that do not change, regardless of sales volume. Rent is considered a fixed cost because it is totally independent of sales activity and, for the duration of the lease, will not change. For example, a five-year lease with an annual rent of \$24,000 must be paid even if there are no sales. It doesn't matter whether sales are high or low; the rent is still \$24,000.

Semivariable Costs

Semivariable costs, such as salaries, wages and telephone expenses, have both variable and fixed components. For budgeting purposes, you may need to break semivariable costs into these two components. The fixed element represents the minimum cost of supplying a good or service. The variable element is that portion of the cost influenced by changes in activity. Examples of semivariable costs are the rental of delivery trucks and photocopying machines for a fixed cost per month plus a variable cost based on the volume of usage.

Inflation and Other Adjustments

A budget will be as good as the numbers used to make it. Therefore, it is important that your estimates and calculations be as accurate as possible.

Profit

Profit should be large enough to make a return on cash investment and a return on your work. Your investment is the money you put into the firm when you started it and the profit of prior years that you have left in the firm (retained earnings). If you can receive 10 percent interest on \$25,000 by investing outside of your business, then you should expect a similar return when investing \$25,000 in equipment and other assets within the business. When preparing your budget, add the expected return on investment to your targeted profits. Check with your trade association, accountant or banker to make sure that the rate of return on your investment is what it should be.

In targeting profits, you want to be sure you are receiving a fair return on your labor; your weekly paycheck should reflect what you could be earning elsewhere as an employee.

Basic Budget Equation

$$\text{Sales} = \text{total cost} + \text{profit}$$

This equation shows that every sales dollar you receive is made up partly of a recovery of your costs and partly of profit.

Another way to express the basic budgeting equation is

$$\text{Sales} - \text{total cost} = \text{profit}$$

This equation shows that after reimbursing yourself for the cost of producing the product or service, the remaining part of the sales dollar is profit. For example, if you expect \$1,000 in sales income and you know that it costs \$750 to produce, market and sell your product or service, your profit will be \$250.

Realistic Estimates

In calculating an operating budget, you will often make estimates based on past sales and cost figures. You will need to adjust these figures to reflect price increases, inflation and other changing factors.

For example, for the past three years, a store owner spent an average of \$3,500 for advertising costs. For the coming year, the owner expects a price increase of 3 percent (.03). To calculate next year's advertising costs, the owner multiplies the average annual advertising costs by the percentage price increase ($3,500 \times .03 = 105$) and adds that amount to the original, annual cost, ($3,500 + 105 = 3,605$). A shortcut method is to multiply the original advertising cost by one plus the rate of increase ($3,500 \times 1.03 = 3,605$).

If your business is a new venture and has no past financial records, rely on your own experience and knowledge of the industry to estimate demand for and costs of your product. You may need to enlist the assistance of a professional accountant or business consultant. If your budget is to be helpful, you must use realistic estimates.

The Budgeting Process

Before you can create a budget, you must answer three questions:

- How much net profit do you want the business to generate during the calendar year?
- How much will it cost to produce that profit?
- How much sales revenue is necessary to support both profit and costs?

To answer the above questions, consider expected sales and all costs, either direct or indirect, associated with the product or service. To make the safest estimates when budgeting, most companies prefer to overestimate expenses; conversely, they prefer to underestimate sales revenue.

Constructing a Budget

Start with either a forecast of sales or a forecast of profits. For practical purposes, most small businesses start with a forecast of profits. In other words, decide what profit you want to make and then list the expenses you will incur to make that profit. To create a budget

- Target desired profit.
- Determine operating expenses.
- Calculate gross profit margin.
- Estimate sales revenues.
- Adjust figures.

A sample budget for the A&A Pool Supply Company illustrates the main steps in budget preparation. As you follow the steps, calculate all the figures yourself. Once you have calculated projected sales, expenses and profit, organize the figures into the format of an income statement as shown in Tables 1, 2 and 3. Refer to Table 1 for A&A Pool Supply Company's income statements for the past three years.

Step 1: Target desired profit. During the three-year period, the company averaged an annual net profit of \$63,100. During Year 2, the company had its highest net profit of \$65,000. In Year 3, sales were up, but net profit declined. For the coming year (Year 4), the company is targeting a net profit of \$65,000.

Step 2: Determine operating expenses. A&A Pool Supply estimates it will have many additional expenditures in Year 4. It will award a 5 percent wage increase to its two employees and purchase a more comprehensive medical insurance package for them at an additional annual cost of \$2,400. The company also plans to install additional telephone services at a cost of \$1,500.

**Table 1 – A&A Pool Supply Company
Historical (Actual) Income Statements For Years 1, 2, and 3**

	Year 1	Year 2	Year 3	Total	Average	Average percent of sales
Sales	\$490,000	\$508,333	\$513,233	\$1,511,566	\$503,855	100%
Cost of goods sold	\$343,000	\$355,833	\$359,263	\$1,058,096	\$352,698	70%
Gross profit margin	\$147,000	\$152,500	\$153,970	\$453,470	\$151,157	30%
Operating expenses:						
Advertising	\$3,200	\$3,700	\$3,600	\$10,500	\$3,500	0.7%
Depreciation	\$4,000	\$4,000	\$4,000	\$12,000	\$4,000	0.8%
Insurance	\$1,700	\$1,700	\$1,700	\$5,100	\$1,700	0.3%
Legal and accounting expenses	\$3,400	\$3,605	\$3,800	\$10,805	\$3,602	0.7%
Office expenses	\$2,200	\$2,400	\$2,650	\$7,250	\$2,417	0.5%
Rent	\$24,000	\$24,000	\$24,000	\$72,000	\$24,000	4.8%
Repair and maintenance	\$300	\$550	\$420	\$1,270	\$424	0.1%
Salaries	\$33,000	\$33,000	\$33,000	\$99,000	\$33,000	6.6%
Telephone and utilities	\$6,000	\$6,350	\$6,200	\$18,550	\$6,183	1.2%
Miscellaneous	\$9,200	\$8,195	\$10,300	\$27,695	\$9,231	1.8%
Total operating expenses	\$87,000	\$87,500	\$89,670	\$264,170	\$88,057	17.5%
Net profit	\$60,000	\$65,000	\$64,300	\$199,330	\$63,100	12.5%

In addition, the company's accountant has advised it to plan on a 3 percent overall inflation rate next year. Taking these factors into consideration, A&A Pool Supply Company figures its expenses as shown in the preliminary budget (Table 2).

Under fixed costs, the company estimates that

- Rent will remain unchanged at \$24,000 per year.
- Depreciation will remain unchanged at \$4,000 per year.
- Salaries will be raised by 5 percent (.05). Salary raises are calculated by multiplying prior salary expenses (\$33,000) by 1.05, equaling budgeted salaries of \$34,650.
- The annual insurance expense of \$1,700 will be increased by \$2,400 to provide for additional medical coverage, so will now be budgeted at \$4,100.

The company calculates variable costs as follows:

- Telephone and utilities expenses will be budgeted for \$7,683. This figure includes average annual cost of \$6,183 plus the \$1,500 expected increase. (Average annual cost is used because the amount fluctuated over the three years.)
- Advertising, repair and maintenance, and miscellaneous expenses also fluctuate annually. These figures are computed by multiplying the three-year average amount (\$3,500) by the 3 percent inflation factor ($3500 \times .03 = 105$) and adding the amount of increase to the three-year average amount ($105 + 3,500 = 3,605$) (or, using the shortcut explained above, multiplying 3,500 by 1.03).
- Due to company growth, office expenses increased 10 percent each year. To compute office expenses for the budget, the company adds the 10 percent growth factor to the 3 percent inflation rate (total increase equals 13 percent) and multiplies one plus this growth factor (1.13) by the most recent office expenses in Year 3, \$2,650. Budgeted office expenses are then estimated at \$2,995 ($2,650 \times 1.13 = 2,995$).
- Legal and accounting expenses increased 6 percent each year. To compute legal and accounting expenses for the budget, the company adds a 6 percent growth factor to the 3 percent inflation rate (totaling 9 percent) and multiplies one plus this rate (1.09) by legal and accounting expenses in Year 3, \$3,800. Legal and accounting expense are then budgeted for \$4,142 ($3,800 \times 1.09 = 4,142$).

Table 2 – A&A Pool Supply Company Preliminary Budget, Year 4

	Amount (\$)	Percent of sales
Sales	533,730	100%
Cost of goods sold	373,611	70%
Gross profit margin	160,119	30%
Operating expenses		
Advertising	3,605	0.7%
Depreciation	4,000	0.8%
Insurance	4,100	0.8%
Legal and accounting expenses	4,142	0.8%
Office expenses	2,995	0.6%
Rent	24,000	4.5%
Repair and maintenance	437	0.1%
Salaries	34,650	6.5%
Telephone and utilities	7,683	1.4%
Miscellaneous	9,507	1.8%
Total operating expenses	95,119	17.8%
Net profit	65,000	12.2%

Estimated office, legal and accounting expenses show an expected 3 percent inflation increase. As these expenses are steadily rising, the highest and most recent figures are used to compute budget figures.

Step 3: Calculate gross profit margin. Gross profit margin is the sum of net profit and total operating expenses, computed by working the preliminary budget backwards. A&A Pool Supply Company's gross profit margin is obtained by adding net profit of \$65,000 to operating expenses of \$95,119, equalling \$160,119.

Step 4: Estimate sales revenue. To target sales, the gross profit margin should be analyzed. Income statements in Table 1 show that A&A Pool Supply Company has experienced a gross profit margin equal to 30 percent of sales for three continuous years. Since a gross profit margin of \$160,119 is expected to equal 30 percent of net sales, then targeted net sales should equal \$533,730 ($160,119 \div .3 = 533,730$).

Step 5: Adjust figures. If the preliminary figure for targeted net sales seems realistic, the budget is complete. If generating the amount of targeted net sales will be a problem, the preliminary budget must be reviewed and adjusted. A&A Pool Supply Company is uncomfortable with the preliminary results; it does not believe it can realistically generate sales of more than \$525,000. To derive a more realistic budget, it decides to

- Delay installing additional telephone services to reduce telephone expenses by \$1,000. The new figure is \$6,683.
- Carefully monitor expenses to reduce miscellaneous expenses by \$1,000. The new figure is \$8,507.
- Choose a similar but less expensive employee benefit package with a higher employee deductible for medical insurance to reduce benefits expenses by \$1,200. The new figure is \$2,900.

After making the above adjustments to its budget (reflected in Table 3), the company's new gross profit margin is \$156,919 (65,000 + 91,919). To compute the targeted sales, the company divides the gross profit margin by 30 percent for a targeted sales of \$523,063. This figure is within the company's limit of \$525,000.

With careful planning and monitoring, A&A Pool Supply Company can achieve its targeted profit of \$65,000.

Budgeting as An Ongoing Process

The annual budget may have to be altered during the year to reflect changing circumstances. There may be a sharp rise or drop in one or more variable expenses or in revenues. Often, annual budgets are divided into smaller monthly or quarterly budgets. Monthly budgets are used to measure actual results against budgeted goals.

The Master Budget

For companies with several departments or work functions, the annual budget should be expanded into a master budget. A master budget consists of a group of separate but interconnected budgets. A company with several departments will have separate sales, production, inventory, marketing and personnel budgets for each

**Table 3 – A&A Pool Supply Company
Final Budget, Year 4**

	Amount (\$)	Percent of sales
Sales	523,063	100%
Cost of goods	366,144	70%
Gross profit margin	156,919	30%
Operating expenses:		
Advertising	3,605	0.7%
Depreciation	4,000	0.8%
Insurance	2,900	0.6%
Legal and accounting expenses	4,142	0.8%
Office expenses	2,995	0.6%
Rent	24,000	4.6%
Repair & maintenance	437	0.1%
Salaries	34,650	6.6%
Telephone and utilities	6,683	1.3%
Miscellaneous	8,507	1.6%
Total operating expenses	91,919	17.6%
Net profit	65,000	12.4%

department. These budgets will depend on and contribute to the company's overall plans. For example, sales projections must take into account inventory levels. Inventory planning must be coordinated with the production department. In order to add employees during peak production periods, the production department must depend on the personnel department.

Summary

A budget is an indispensable tool for converting plans into a successful reality. The budget helps focus your thoughts on the direction in which you are headed. It indicates how much cash you have to spend, your expenses and how much you need to earn. By planning on paper first, you minimize the risks associated with your business endeavor. A good budget can build morale by helping you organize, communicate and motivate employees to do their part in achieving the company's financial goals.

BASIC BUDGETS FOR PROFIT PLANNING—Charles J. Woelfel

Budgeting requires you to consider your basic objectives, policies, plans and resources.

- It requires you and your key employees to undertake a coordinated, comprehensive and informed effort to achieve common objectives.
- It helps you to ensure that proper controls and evaluation procedures are established throughout your company.
- It encourages and motivates everyone concerned to put forth a reasonable effort.
- It provides a plan so that all of you know where you are going, as well as why, how, when and with whom.

In short, the budgeting process is a valuable tool in planning, income and expense.

You can prepare a budget to cover practically any time period. Usually, a one-year budget is developed. In most cases, it is projected on a quarterly basis, with each quarter detailed in months (sometimes weeks). It is also possible to prepare budgets for two, three and five years. Anything beyond five years generally is impractical.

The following simplified examples give you an idea of the various interrelations developed in the budgeting process. (These figures are relative to one given set of values. Of course, different volumes of business would determine different costs and thus affect the realizable

profits.) Using these concepts as a framework, you and your staff can set up your own comprehensive profit-planning budget.

A comprehensive budget picture begins with the sales budget. Other budgets are related directly or indirectly to this budget. Table 4 is a sales forecast in units.

Assume you sell a single product with a sales price of \$10. Your sales budget in terms of dollars would look like Table 5.

Say the estimated per unit cost of the project is \$1.50 for direct material, \$2.50 for direct labor and \$1.00 for manufacturing overhead. Table 6 reflects applying unit costs to the sales budget in units.

Later, before a cash budget can be compiled, you must 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) as shown in Table 7 and 8.

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 (see Tables 9 and 10).

Now, from the information gathered 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.

Table 4 – Sales budget in units for the year ended December 31, 19__

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
Total	37,000	7,000	8,500	10,000	11,500

Table 5 – Sales budget in dollars for the year ended December 31, 19__

Territory	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
East	260,000	50,000	60,000	70,000	80,000
West	110,000	20,000	25,000	30,000	35,000
Total	370,000	70,000	85,000	100,000	115,000

Table 6 – Cost of goods sold budget for the year ended December 31, 19__

	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
Manufacturing overhead	37,000	7,000	8,500	10,000	11,500
Total	185,000	35,000	42,500	50,000	57,500

Table 7 – Selling expenses budget for the year ended December 31, 19__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Commissions	46,250	8,750	10,625	12,500	14,375
Rent	7,000	1,750	1,750	1,750	1,750
Advertising	9,250	1,750	2,125	2,500	2,875
Telephone	4,600	875	1,062	1,250	1,413
Depreciation—office	900	225	225	225	225
Other	22,000	4,150	5,088	6,025	6,737
Total	90,000	17,500	20,875	24,250	27,375

**Table 8 – Selling expenses budget—
cash requirements for the year ended December 31, 19__**

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Total selling expenses					
less depreciation	90,000	17,500	20,875	24,250	27,375
Office expense	900	225	225	225	225
Cash requirements	89,100	17,275	20,650	24,025	27,150

Table 9 – Administrative expenses budget for the year ended December 31, 19__

	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 expense	3,700	700	850	1,000	1,150
Other expenses	3,700	700	850	1,000	1,150
Total	37,000	7,000	8,500	10,000	11,500

**Table 10 – Administrative expenses budget—
cash requirements for the year ended December 31, 19__**

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Estimated administrative 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

Although payable at maturity of the note, the interest appears in the last three quarters of the year. The statement will resemble Table 11.

Estimating that 90 percent of your account sales is collected in the quarter in which those sales were made, 9 percent is collected in the quarter following the quarter in which the sales were made and 1 percent is uncollectible, your accounts receivable budget of collections will look like Table 12.

Going back to the sales budget in units, 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: first quarter, 3,000 units; second quarter, 3,500 units; third quarter, 4,000 units; and fourth quarter, 4,500 units (see Table 13).

Next, based on the production budget, prepare a budget to show the purchases needed during each of the four quarters, expressed in dollars. Take the production and inventory figures and multiply them by the cost of material (previously estimated at \$1.50 per unit). You could prepare a similar budget expressed in units (see Table 14).

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.

Table 11 – Budgeted income statement for the year ended December 31, 19__

	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	555,000	105,000	127,500	150,000	172,500
Operating expenses					
Selling	90,000	17,500	20,875	24,250	27,375
Administrative	37,000	7,000	8,500	10,000	11,500
Total	127,000	24,500	29,375	34,250	38,875
Net income from					
Operations	58,000	10,500	13,125	15,750	18,625
Interest expense	450		150	150	150
Net income before					
Income taxes	57,550	10,500	12,975	15,600	18,475
Federal income tax (25% average)	14,388	2,625	3,244	3,900	4,619
Net income	43,162	7,875	9,731	11,700	13,856

**Table 12 – Budget of collections of accounts
receivable for the year ended December 31, 19__**

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

Table 13 – Production budget in units for the year ended December 31, 19__

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

Table 14 – Budget of direct materials purchases for the year ended December 31, 19__

	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	5,250	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

Since any discounts given to you by your suppliers (net purchase – discount) were figured into the \$1.50 unit cost estimate, purchase discounts do not appear in the payment budget. Thus your payment budget will come out like Table 15.

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.) (See Table 16.)

Now outline the items that make up your factory overhead, and prepare a budget as shown in Table 17.

Figure the cash payments for manufacturing overhead by subtracting depreciation, which requires no cash outlay, from the totals above, and you will have the breakdown shown in Table 18.

Now comes the all-important cash budget. Put it together by using the collection of accounts receivable budget, selling expenses budget–cash requirements, administrative expenses budget–cash requirements,

Table 15 – Payment budget for the year ended December 31, 19__

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

Table 16 – Direct labor budget—cash requirements for the year ended December 31, 19__

	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

**Table 17 – Manufacturing overhead budget—
cash requirements for the year ended December 31, 19__**

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Production—units	39,500	8,000	9,000	10,500	12,000
Manufacturing 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

Table 18 – Manufacturing overhead budget for the year ended December 31, 19__

	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	11,400	2,800	1,800	2,500	4,300
Total	39,500	8,000	9,000	10,500	12,000

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 (see Table 19).

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 Table 20.

Table 19 – Cash budget for the year ended December 31, 19__

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Beginning cash balance	15,000	15,000	16,987	26,812	40,012
Cash collections	361,950	69,000	82,800	97,650	112,500
Total	376,950	84,000	99,787	124,462	152,512
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
Manufacturing overhead	36,700	7,300	8,300	9,800	11,300
Selling expense	89,100	17,275	20,650	24,025	27,150
Administrative expenses	33,300	6,300	7,650	9,000	10,350
Federal income tax	14,388	14,388			
Dividends	20,000				20,000
Interest expenses	450				450
Loan repayment	10,000				10,000
Total	361,313	77,013	72,975	84,450	126,875
Cash surplus		6,987			
Bank loan received	10,000	10,000			
Ending cash balance	25,637	16,987	26,812	40,012	25,637

Table 20 – Budgeted balance sheet December 31, 19__

Assets	19__	19__
Current assets		
Cash	10,000	25,637
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	44,637
Fixed assets		
Land	50,000	50,000
Building	148,000	148,000
Less depreciation allowance	(37,000)	(33,000)
Total fixed assets	161,000	165,000
Total assets	210,600	209,637
Liabilities and shareholders' equity		
Current liabilities accounts payable	9,375	5,000
Shareholders' equity		
Capital stock (10,000 shares; \$10 par value)	100,000	100,000
Retained earnings	101,225	104,637
Total liabilities and shareholders' equity	210,600	209,637

In order to make the most effective use of your budgets, you will want to establish reporting devices. These will include periodic reports and reviews on both efforts and accomplishments. It is through comparing actual performance with budgeted projections that you maintain control of operations.

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

Two typical budget reports are shown in Table 21 to demonstrate various forms these reports may take.

Table 21 – Report of actual and budgeted sales for the year ended December 31, 19__

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

Table 21 – Budgeted report on selling expenses for the year ended December 31, 19__

Budget this month	Actual this month	Variation this month	Budget year to date	Actual year to date	Variations year to date	Remarks

APPENDIX: INFORMATION RESOURCES

U.S. Small Business Administration (SBA)

The SBA offers an extensive selection of information on most business management topics, from how to start a business to exporting your products.

This information is listed in *The Small Business Directory*. For a free copy write to: SBA Publications, P.O. Box 1000, Fort Worth, TX 76119.

SBA has offices throughout the country. Consult the U.S. Government section in your telephone directory for the office nearest you. SBA offers a number of programs and services, including training and educational programs, counseling services, financial programs and contract assistance. Ask about

- **Service Corps of Retired Executives (SCORE)**, a national organization sponsored by SBA of over 13,000 volunteer business executives who provide free counseling, workshops and seminars to prospective and existing small business people.
- **Small Business Development Centers (SBDCs)**, sponsored by the SBA in partnership with state and local governments, the educational community and the private sector. They provide assistance, counseling and training to prospective and existing business people.
- **Small Business Institutes (SBIs)**, organized through SBA on more than 500 college campuses nationwide. The institutes provide counseling by students and faculty to small business clients.

For more information about SBA business development programs and services call the SBA Small Business Answer Desk at 1-800-U-ASK-SBA (827-5722).

Other U.S. Government Resources

Many publications on business management and other related topics are available from the Government Printing Office (GPO). GPO bookstores are located in 24 major cities and are listed in the Yellow Pages under the "bookstore" heading. You can request a *Subject Bibliography* by writing to Government Printing Office, Superintendent of Documents, Washington, DC 20402-9328.

Many federal agencies offer publications of interest to small businesses. There is a nominal fee for some, but most are free. Below is a selected list of government agencies that provide publications and other services targeted to small businesses. To get their publications, contact the regional offices listed in the telephone directory or write to the addresses below:

Consumer Information Center (CIC)

P.O. Box 100
Pueblo, CO 81002

The CIC offers a consumer information catalog of federal publications.

Consumer Product Safety Commission (CPSC) Publications Request

Washington, DC 20207

The CPSC offers guidelines for product safety requirements.

U.S. Department of Agriculture (USDA)

12th Street and Independence Avenue, SW
Washington, DC 20250

The USDA offers publications on selling to the USDA. Publications and programs on entrepreneurship are also available through county extension offices nationwide.

U.S. Department of Commerce (DOC)

Office of Business Liaison

14th Street and Constitution Avenue, NW
Room 5898C

Washington, DC 20230

DOC's Business Assistance Center provides listings of business opportunities available in the federal government. This service also will refer businesses to different programs and services in the DOC and other federal agencies.

U.S. Department of Health and Human Services (HHS)

Public Health Service

Alcohol, Drug Abuse and Mental Health Administration

5600 Fishers Lane
Rockville, MD 20857

Drug Free Workplace Helpline: 1-800-843-4971. Provides information on Employee Assistance Programs.

National Institute for Drug Abuse Hotline:

1-800-662-4357. Provides information on preventing substance abuse in the workplace.

The National Clearinghouse for Alcohol and Drug

Information: 1-800-729-6686 toll-free. Provides pamphlets and resource materials on substance abuse.

U.S. Department of Labor (DOL)
Employment Standards Administration
200 Constitution Avenue, NW
Washington, DC 20210
The DOL offers publications on compliance with labor laws.

U.S. Department of Treasury
Internal Revenue Service (IRS)
P.O. Box 25866
Richmond, VA 23260
1-800-424-3676
The IRS offers information on tax requirements for small businesses.

U.S. Environmental Protection Agency (EPA)
Small Business Ombudsman
401 M Street, SW (A-149C)
Washington, DC 20460
1-800-368-5888 except DC and VA
703-557-1938 in DC and VA
The EPA offers more than 100 publications designed to help small businesses understand how they can comply with EPA regulations.

U.S. Food and Drug Administration (FDA)
FDA Center for Food Safety and Applied Nutrition
200 Charles Street, SW
Washington, DC 20402
The FDA offers information on packaging and labeling requirements for food and food-related products.

For More Information

A librarian can help you locate the specific information you need in reference books. Most libraries have a variety of directories, indexes and encyclopedias that cover many business topics. They also have other resources, such as

- **Trade association information**
Ask the librarian to show you a directory of trade associations. Associations provide a valuable network of resources to their members through publications and services such as newsletters, conferences and seminars.
- **Books**
Many guidebooks, textbooks and manuals on small business are published annually. To find the names of books not in your local library check *Books In Print*, a directory of books currently available from publishers.
- **Magazine and newspaper articles**
Business and professional magazines provide information that is more current than that found in books and textbooks. There are a number of indexes to help you find specific articles in periodicals.

In addition to books and magazines, many libraries offer free workshops, lend skill-building tapes and have catalogues and brochures describing continuing education opportunities.



