

Dollars and Sense

Introduction

Your dream is to operate a profitable business and make a good living. Before you open, however, you want some indication that your business will be profitable, if not immediately then certainly some time in the not too distant future. Although “profitable” can be a relative term, it should signify sufficient sales income to pay all of your operating bills and you as well. Although you may decide that you will not take any income from the business in the initial stages, often a wise and necessary strategy, any business that cannot eventually pay its owner is simply not a profitable venture.

You may be utterly confident of financial success or you may conclude that making any predictions is like using a crystal ball. If you take your time and gather the best information during your planning, however, you can reasonably estimate the financial prospects of the business. These estimates serve several purposes:

1. Initially, they are a reality check on whether and when you can sell enough to cover your costs.
2. Sales may not cover all expenses, so you need to plan for enough working capital to compensate for the difference.
3. Estimates address the timing of sales and expenses, business cycles, and the effects of seasonality.
4. The process of preparing a financial projection also assures that you’ve covered all foreseeable aspects of the operation.
5. Finally, it allows you to test the financial impact of different decisions.

The estimates, unfortunately, are “best guesses,” but, hopefully by using actual information revealed during your planning, the guesses are based on fact and are rational. A breakeven analysis and cash flow projection are two ways to predict profitability.

A **breakeven analysis** shows the point at which sales or production is sufficient to cover all identified expenses, that is, when profit is zero or greater. In the early stages, a breakeven analysis can serve as a reality check on your early aspirations.

A **cash flow statement** completed on a monthly basis shows the flow of cash through the normal business cycle – cash in from sales, receivables, and other income – cash out for products, materials, and operating expenses – with beginning and ending cash balances. This type of financial statement is usually required by lenders as part of the financial plan. Even if you are not seeking outside funding, a cash flow projection is a beneficial exercise.

Breakeven Analysis

The breakeven point is either the dollar value of sales or production levels that must be met to cover or exceed all direct and indirect expenses. Sales beyond that point are profit to the company. Doing a breakeven analysis before you open or while you are considering this business, can be a quick way to test your plans. For example, if you think you have \$6,000 in expenses each month and you know that you make \$0.40 gross profit on each dollar of sales, you’d have to sell 15,000 units to breakeven ($\$6,000 \div \0.40). This

leads to the inevitable question of when you can reach that level. Could the answer possibly dissuade you from entering into this business? Or, are you optimistically encouraged?

You might also use a breakeven analysis to help you sort out business decisions such as when you can pay yourself or when you can hire the part-time receptionist.

Figuring your breakeven depends on the type of business. If you plan a **service business**, your breakeven point is simply the total of your operating expenses. If you operate either a **retail or manufacturing** business where you also have a cost of product for resale or direct materials and labor used in creating the products, the breakeven depends on your profits after the cost of the product is deducted from the sales price.

Breakeven for Services.

Since the breakeven point for services is the amount necessary to cover all of your operating/fixed expenses, the practical objective here is to equate that amount to anticipated sales.

- A **fixed expense** is any business expense paid regardless of the number of services provided (examples: rent, insurance, loan, advertising, wages).
- Selling price** is the average price the business charges customers for a single service or your billable hourly rate.

How many billable hours or how many repair calls, for example, must you make to cover your monthly costs? Let's look at an *example*: **Now, ask yourself -- is this is feasible?**

Monthly fixed expenses	=	\$5,000.	
Average repair charge	=	\$200.	
Breakeven repair calls	=	$\$5,000 \div \200	= 25 repair calls

Here is another *example* with a billable hourly rate. **Is this is feasible?**

Monthly fixed expenses	=	\$5,000.	
Hourly rate	=	\$60.	
Breakeven billable hours	=	$\$5,000 \div \60	= 83 billable hours

Breakeven for Retail/Manufacturing.

The basic formula for breakeven takes the total of your fixed expenses and divides that number by either your gross profit or gross profit margin. If you use the gross profit dollar value, your breakeven will give you the number of units you must sell to breakeven. If you use the gross profit margin or percentage, the answer will yield the total dollar value of sales you must achieve.

- Selling price** is the price the business charges customers for one (1) product.
- A **variable cost** is the cost incurred to manufacture or resell one product. (example, direct materials, direct labor).
- Gross profit** is the amount left from the selling price of one (1) unit after variable costs are deducted. **Gross profit margin** is the gross profit as a percentage of sales figured by dividing the variable cost by the sale price.

Sales price	\$29.95	100.0%
- Variable costs	<u>-\$13.50</u>	45.0%
Gross Profit	\$16.45	55.0%
Gross Profit Margin ($\$16.45 \div \29.95) = 55.0%		

- A **fixed expense** is any business expense paid regardless of the number of products made or sold (examples: rent, insurance, loan, advertising).

Rent	\$1,500.
Phone	200.
Utilities	300.
Loan	1,200.
Other	<u>1,800.</u>
	\$5,000.

The formulas for breakeven in a retail or manufacturing business have to take into account the direct cost of products or variable costs. The formulas and *examples* to determine sales either by number of units sold or by dollar sales are below. ***Again ask yourself if and when the result is feasible.***

Unit sales: Monthly Fixed Expenses (\$) ÷ Gross Profit (Selling Price - Variable Cost) (\$)

Monthly fixed expenses	=	\$5,000
Gross Profit (price - variable costs)	=	$(\$29.95 - 13.50) = \16.45
Breakeven units	=	$\$5,000 \div \$16.45 = 304 \text{ products}$

Dollar sales: Monthly Fixed Expenses (\$) ÷ Gross profit margin (%)

Monthly fixed expenses	=	\$5,000
Gross Profit Margin (gross profit ÷ sales price)	=	$(\$16.45 \div \$29.95) = 55.0\%$
Breakeven sales	=	$\$5,000 \div .55 = \$9,091$

Paying Yourself.

Don't forget to account for income for yourself. The amount you'd like to earn each month can be included in or added to the fixed expense amount to reevaluate your breakeven point either in units or dollar sales. Using the same *example* above, you need to bring in \$14,545 in sales to cover a \$3,000 monthly income, or reach a \$5,454 increase in sales. ***When will this be feasible?***

Dollar sales: (Monthly Fixed Expenses (\$) + Personal Income) ÷ Gross profit margin (%)

Monthly fixed expenses	=	\$5,000
Personal Income	=	\$3,000
Gross Profit Margin (gross profit price ÷ sales price)	=	$(\$16.45 \div \$29.95) = 55.0\%$
Breakeven sales	=	$\$8,000 \div .55 = \$14,545$

Cash Flow Projection

Cash Flow Projection (Figure 1)

A cash flow projection allows you to show investments, capital expenditures, revenue and expenses, and their effects on the business. Completing the projection is more difficult if you have not planned adequately. The following notes and suggestions can help you. Remember the cash flow shows *cash* when it's received and when it's paid out. Consequently, "paper" accounting such as depreciation is not shown on a cash flow projection. Both principal and interest payments for debt are shown, however. (See **Figure 2**, sample completed cash flow form)

Investment and capital expenditures (Figure 3)

New businesses or existing businesses undergoing change should show beginning cash or equity investments, loans, or other startup capital. Subtract from these amounts expenditures for real estate, inventory, equipment, or deposits required before you open. The difference is your working capital to start operations which is shown as the ending cash balance (Cash Flow Projection, first column, "Startup")

Cost of goods sold or cost of merchandise for resale

Cost of goods or purchases is estimated for each month. This estimate can be an average percentage of sales (e.g., 45%) based on your knowledge of the business or on published industry standards, such as *RMA Annual Statement Studies*. Or, you can use actual amounts of merchandise purchases, but this is often difficult to predict.

Operating expenses

Operating expenses should be as accurate as possible, especially if you've done your planning. Here are a few tips.

- Use identified amounts rather than guesses, e.g., monthly lease, employee wages, advertising.
- Call utilities and insurance companies for estimates including worker's compensation and all insurances.
- Estimate payroll taxes at approximately 12-15% of wages.
- Always include your own draw or salary.
- Get bids.

Personal Income

You should itemize your monthly personal expenses and decide how much you must take from business profits for income. You can use the Monthly Personal Expense Worksheet to calculate this number (**Figure 4**).

Monthly sales estimates

Predicting monthly sales is the hardest task of this process, and no book will give you an exact formula for your specific business. Nevertheless, your method should be based on reason and verifiable information. Using a variety of reliable sources allows you to test your prediction. Remember, if you have a receivable, the projection should represent your typical receivable cycle, e.g., cash coming in over 30 to 90+ days.

Here are some sources you can use to base your prediction:

- Use prior sales from an existing business or sales from your previous experience in the industry, possibly add a reasonable, justifiable percent increase based on these historical figures.
- Use published industry financial ratios e.g., *Risk Management Associates (RMA) Annual Statement Studies*.
- Use published information from trade associations for averages reported in the industry, for example, estimates of the number of customers per month times reported average purchase amount.
- Consult with suppliers or competitors.
- Estimate operating capacities, e.g., number of units produced per working hour, number of successful calls per month.

Other Issues

- Make estimates reasonable, but when in doubt use worse-case projections.
- Factor in receivables, cash revenues expected within 30 days, 60 days.
- If helpful, breakout sales by product line or type, e.g., product vs. service, retail vs. wholesale.
- Always accompany statements with a written **assumption statement** explaining how you derived the numbers.

Service Business Example

Estimate number of clients per month	30
Average fee per client	<u>x \$65</u>
Compute total monthly sales =	\$1,950.

The number of successful clients is the variable number that needs to be justified from reliable sources.

Retail Example

Average customer sale	\$20.
Average number of buying customers per day	<u>x 35</u>
Compute average daily sales	\$700.
Times the number of days open per month	<u>x 25</u>
Therefore, monthly revenue =	\$17,500.

The average customer sale may be available from a trade association. The average number of customers per day is the variable that needs to be justified from reliable sources.

Restaurant Example

Number of seats	45
Number of seat turns at dinner	x 2
Average dinner check	<u>x \$22</u>
Daily revenue	\$1,980.
Times the number of days open per month	<u>x 25</u>
Therefore, monthly revenue =	\$49,500.

The number of seat turns is the variable which you can verify from others in the business or through the national restaurant trade association.

Sales Trend Example

Annual sales \$81,900.

Month	Typical Sales Trend	Monthly Sales
January	6%	\$4,914
February	7%	\$5,733
March	7%	\$5,733
April	9%	\$7,371

Using annual sales, apply monthly seasonal sales trend. A trade association is an excellent source for this information.



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FIGURE 1 MONTHLY CASH FLOW PROJECTION

Source: SBA FORM 1100 (1-83) REF: SOP 60 10 Previous Editions Are Obsolete

NAME OF BUSINESS		ADDRESS	OWNER		TYPE OF BUSINESS		PREPARED BY	DATE
YEAR	MONTH	Pre- Start-Up Position	1	2	3	Periods 4, 5, 6, 7, 8, 9, 10, 11	12	TOTAL Columns 1-12
		Estimate	Estimate	Estimate	Estimate		Estimate	Estimate
1. CASH ON HAND (Beginning of month)								1.
2. CASH RECEIPTS								2.
(a) Cash Sales								(a)
(b) Collections from credit Accounts								(b)
(c) Loan or Other Cash Injection (Specify)								(c)
3. TOTAL CASH RECEIPTS (2a + 2b + 2c = 3)								3.
4. TOTAL CASH AVAILABLE (Before cash out) (1 + 3)								4.
5. CASH PAID OUT								5.
(a) Purchases (Merchandise)								(a)
(b) Gross Wages (Excludes withdrawals)								(b)
(c) Payroll Expenses (Taxes, etc.)								(c)
(d) Outside Services								(d)
(e) Supplies (Office and operating)								(e)
(f) Repairs and Maintenance								(f)
(g) Advertising								(g)
(h) Car, Delivery, and Travel								(h)
(i) Accounting and Legal								(i)
(j) Rent								(j)
(k) Telephone								(k)
(l) Utilities								(l)
(m) Insurance								(m)
(n) Taxes (Real estate, etc.)								(n)
(o) Interest								(o)
(p) Other Expenses (Specify each)								(p)
(q) Miscellaneous (Unspecified)								(q)
(r) Subtotal								(r)
(s) Loan Principal Payment								(s)
(t) Capital Purchases (Specify)								(t)
(u) Other Start-Up Costs								(u)
(v) Reserve and/or Escrow (Specify)								(v)
(w) Owner's Withdrawal								(w)
6. TOTAL CASH PAID OUT (Total 5a thru 5w)								6.
7. CASH POSITION (End of month) (4 minus 6)								7.

FIGURE 2
Sample Year 1 Cash Flow Statement

	Start-Up	Mar. 98	Apr. 98	May 98	Jun. 98	Jul. 98	Aug. 98	Sept. 98	Oct. 98	Nov. 98	Dec. 98	Jan. 99	Feb. 99	Total
Cash on Hand		148850	97570	88440	85017	83442	92542	100292	104292	113412	127402	136952	150552	
Cash Receipts														
Cash Sales	0	25000	30000	36500	36000	34000	36000	37400	40800	34000	44000	18800	20000	353700
Collections from Credit Accounts	0	0	35150	40607	46075	51300	48450	51300	54720	58140	53200	62700	26790	438942
Bank Loan or Other Cash Injection	250000	0	0	0	0	0	0	0	0	0	0	0	0	250000
Owner's Equity	50000	0	0	0	0	0	0	0	0	0	0	0	0	50000
Total Cash Available	300000	173850	162720	165547	167092	168742	176992	188992	199812	205552	224602	218452	197342	
Expenses														
Non-food Purchases	1000	1868	1868	2048	2100	1850	1900	2100	2250	1950	2400	1500	1500	23334
Food Purchases	14000	16812	16812	18432	18900	16650	17100	18900	20250	17550	21600	13500	13500	210006
Gross Wages (Excl. Withdrawals)	3000	28000	28000	32000	32000	28000	28000	32000	32000	28000	32000	25000	25000	374000
Payroll Expenses (Taxes, Wk Comp.)	750	7500	7500	8500	8500	7500	7500	8500	8500	7500	8500	6750	6750	93500
Owners Withdrawal	0	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	200	2400
Supplies (Office and Operating)	1800	200	200	200	200	200	200	200	200	200	200	200	200	2400
Laundry	0	200	200	200	200	200	200	200	200	200	200	200	200	2400
Repairs and Maintenance	250	250	250	250	250	600	600	600	600	600	600	600	600	5800
Advertising	10000	5000	3000	2000	4000	3000	3000	4000	4000	4000	4000	2000	2000	40000
Car, Delivery, and Travel (Van)	0	0	0	0	0	700	700	700	700	700	700	700	700	5600
Accounting	100	200	200	200	200	200	200	200	200	200	200	200	200	2400
Rent	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	60000
Telephone	500	100	100	150	150	150	150	150	150	100	100	100	100	1500
Utilities	1800	2000	2000	2400	3000	3000	3000	3000	3200	3000	3000	3000	3000	33600
Insurance (Liability & Contents)	800	800	800	800	800	800	800	800	800	800	800	800	800	9600
Legal	2000	0	0	0	0	0	0	0	0	0	0	0	0	0
Leasehold Improvements	100000	0	0	0	0	0	0	0	0	0	0	0	0	0
Point of Sale Micros System	6000	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank Loan Payment (\$250K@10%/7 yr)	4150	4150	4150	4150	4150	4150	4150	4150	4150	4150	4150	4150	4150	49800
Reserve	0	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	24000
Total Cash Paid Out	151150	76280	74280	80530	83650	76200	76700	84700	86400	78150	87650	67900	67900	940340
Cash Position	148850	97570	88440	85017	83442	92542	100292	104292	113412	127402	136952	150552	129442	

FIGURE 3

CAPITAL INVESTMENT

USES AND SOURCES OF FUNDS

	USE OF FUNDS	SOURCE OF FUNDS		
	CAPITAL INVESTMENTS (\$\$ AMOUNT)	LENDER (\$\$ AMOUNT)	TRADE CREDIT (\$\$ AMOUNT)	EQUITY (\$\$ AMOUNT)
Facility (cost, closing, deposits)				
Equipment/Furniture/Fixtures				
Inventory				
Start-up Costs (travel, training, deposits, prepaid expenses)				
Working Capital (cash for operations)				

FIGURE 4

Monthly Personal Expense Worksheet

Fixed Payments:	House	\$ _____
	Vehicles	\$ _____
	Credit Cards	\$ _____
Utilities:	Electricity	\$ _____
	Gas	\$ _____
	Water	\$ _____
	Sewage	\$ _____
	Telephone/cellular	\$ _____
Insurance:	Property	\$ _____
	Health	\$ _____
	Life	\$ _____
Food:	Groceries	\$ _____
	Restaurant	\$ _____
Car Expenses:	Insurance	\$ _____
	Gas & oil	\$ _____
	Repairs & maintenance, tires	\$ _____
	Tag	\$ _____
Personal:	Clothing	\$ _____
	Entertainment	\$ _____
	Savings	\$ _____
	Investments	\$ _____
	Contributions	\$ _____
	Gifts	\$ _____
	Medical	\$ _____
	Dental	\$ _____
	Other	\$ _____
Other Expenditures		
	Holiday/other celebrations	\$ _____
	School related expenses	\$ _____
	Dues & memberships	\$ _____
	Subscriptions and newspapers	\$ _____
	Vacations and trips	\$ _____
	Other	\$ _____
TOTALS		\$ _____