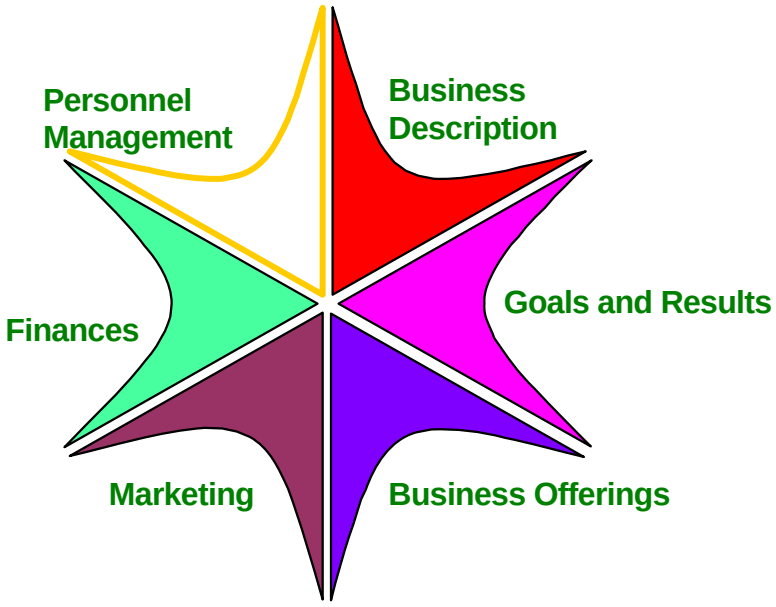
# How to Test if Your Business Will Make Money




CorNu Enterprises

**A CorNu Enterprise Educational Product**

BIZBITE CONSULTING GROUP

# How to test If Your Business Will Make Money

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# Table of Contents

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# Credit Page

The founders of BizBite Consulting Group and developers of CorNu Enterprises dynamic approach to education are

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## How is this module organized?

We divided the How to Test Your Business will make Money module into three major headings:

1. Financial feasibility study of the business offering
2. Break-even point analysis
3. Preparing pro-forma cash flow statements

Within the module, the material is divided into these headings:

| | |
|---|---|
| Introduction | (Content of the section) |
| How to use this section | Uses |
| New businesses | Summary |
| Existing businesses | Celebrate |

### *Celebrate!*

It is important that you recognize your achievements and celebrate each small step. Phone some friends and celebrate it. We will offer you opportunities to celebrate at the end of each part of the module. Have fun with them. We had fun creating them for you.

## Suggestions on how to use this module

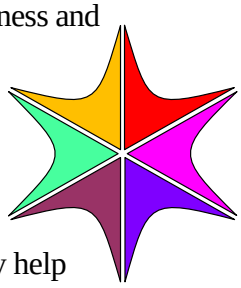
This module is organized so that you decide:

- In what order you want to access the various titles
- What you want to ignore
- How many times you want to revisit the material

Just return to the Table of Contents and click on what you want to read or review again.

## The six-pointed star

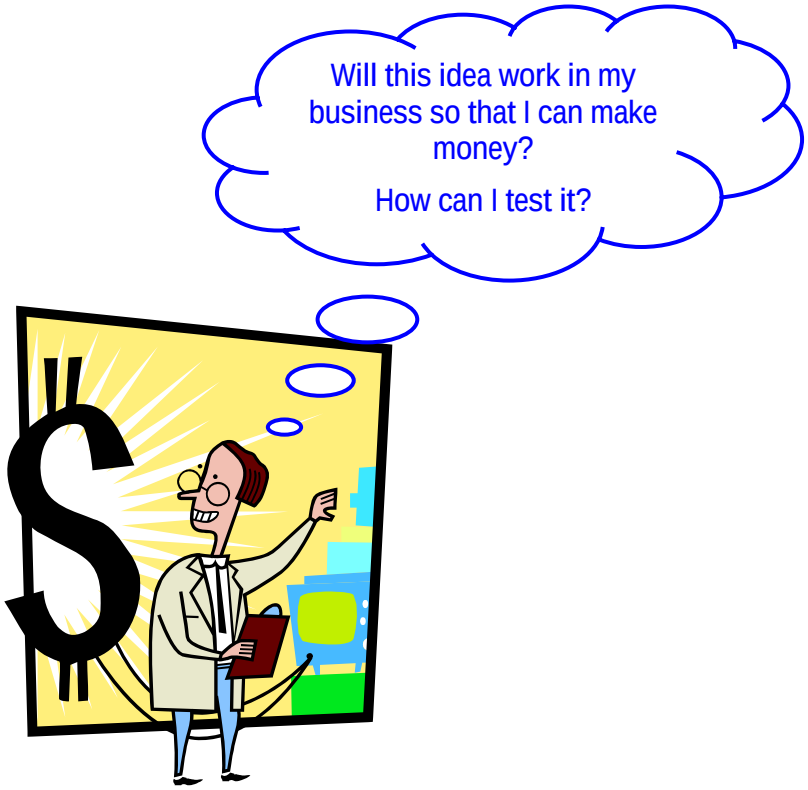
We have depicted business and a business plan as a six-pointed star. Each part of the star represents a major aspect of your business and an important element of a business plan. Together, they form a complete view of your business and your business plan.



We have carried this star throughout all the BizBite Consulting Group products and all the modules.

As each new section is begun or completed, the appropriate part of the star is colored and the rest of the star is colorless. This may help you to see how a specific topic relates to the whole business and to remind you that it is part of the whole.

# How to Test if Your Business Will Make Money



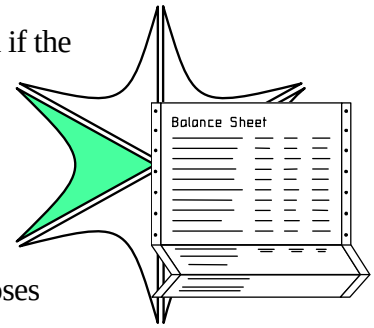

## Glossary

Each term that is used in this section is defined in the Glossary of Terms. You will notice that the first time it is used it is coloured green in ***Bold Italics***.

Click on the Glossary in the Bookmarks or Thumbnails and scroll down to find the definition. Alternatively, print the Glossary.

## Introduction

Once the ***market*** has been thoroughly researched and analyzed and a ***marketing plan*** developed, you must test whether the plan can be handled financially by your business.




Can adjustments be made to the marketing plan if the business cannot handle the marketing plan?

What will those adjustments be?

Will it be possible to start with a less ambitious plan and phase in the original plan?

All of these considerations, and more, are the purposes behind doing financial tests of the marketing plan.

In the first two sections of this module we will discuss:

1. Financial feasibility study of the business' ***offerings***
2. Break-even point analysis

# Financial Feasibility Study of the Business' Offerings

## Introduction

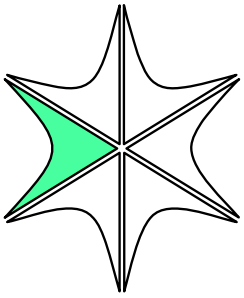
Whether it is a new business or an existing business, the decision-making process regarding what ***offerings*** your business is going to market, or is marketing, are the same.

***This section assumes that you have already completed:***

- Competition and your competitive edge
- Market analysis
- A customer/client profile analysis
- Products and sources of supply
- The marketing plan
- The target market and target marketing plan

A financial feasibility study will determine if your offering mix or offering line is financially doable. It answers this question:

Will you make a profit with this offering line or offering mix to these designated market segments?



## *How to use this material*

### New businesses

This module assumes that you have already made tentative decisions about what offerings the business will sell. Take this last step. You need to complete a financial feasibility study of them before coming to a final decision.

This feasibility analysis will determine if you can make a profit using this market segment with these offerings.

For a new business, the offerings will be projected and the calculation estimates based on industry norms derived from your market research.

### Existing businesses

An existing business has the advantage of having historical data. It also has a great deal of local knowledge about the market it serves. However, every time a business plan is prepared, it is important to go through the same process by

- Testing the current offerings mix
- Examining and considering new offerings that may be available or offered by competitors

Through the financial feasibility process outlined below, your business will decide at regular intervals (yearly business plan process) whether to:

- Add new offerings
- Expand, curtail or eliminate current offerings

For both new and existing businesses, this analysis is an important forerunner to the development of goals and results and especially to the marketing strategy of the business plan. This is because a major commitment of the resources of a company will be directed towards the marketing of whatever offering mix is selected.

## The analyzing process

Use this analyzing process to determine if it is financially doable to sell the offerings

- To the various specified market segments
- At the specified prices

The six steps of this analyzing process are:

1. List and describe the various offerings of your business (either the ones that you already have on hand or those that you tentatively have chosen.)

There is an example below that demonstrates the next three steps. (2, 3, and 4)

2. Describe the relationship, if any, between each market segment of your business
   - Describe the part each market segment plays in the business
   - Identify the relative importance of each market segment of your business
3. State the volume contribution of each market segment versus the time spent and expenses incurred
4. State the profit contribution of each market segment versus the time spent and expenses incurred
5. Show a Break-even analysis (BEP) of each market segment (See ***Break-even Point Analysis*** *below*)
6. Draw conclusions about your offering mix and your market segments

No two businesses are the same. In addition, the relationship between business segments is often constantly changing.

Here is an example of three of the steps (2–4) mentioned above and how decisions can be made because of the analysis.

The chart below indicates the answers to the next five questions:

1. The five market segments in this example are retail, commercial, industrial, government, and institutional.
2. The volume's contribution of each market segment is 25%, 45%, 15%, 5%, 10% respectively
3. What proportion of revenue does each market segment contribute to the business? See number 1 in the chart below.
4. What is the profit contribution of each market segment? See number 2 in the chart below.
5. What is the proportion of the expenses used by each market segment? See number 3 in the chart below.

***For Example***

This example is a continuation of the building materials business mentioned in Goals and Results (***Writing goals and results***) and Business Descriptions (***Why write business descriptions****? In the module,* **Overview of Business Plan—Why you need one**.)

| | Retail | Commercial | Industrial | Gov't | Institutional |
|---|---|---|---|---|---|
| 1. Proportions of revenue | 25% | 45% | **15%** | **5%** | **10%** |
| 2. Profits contributed | 55% | 30% | **3%** | **5%** | **7%** |
| 3. Expenses used | 30% | 45% | **10%** | **10%** | **5%** |

You, or your business manager, may well decide that the sales volume and profit contribution of the industrial, government, or institutional business is not worth the drain on the resources of the organization.

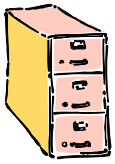
Because of the analysis, it could be decided to cut back or eliminate these market segments.

> In this example, the commercial business segment uses 45% of the expenses and only contributes 30% of the profit. However, in this type of business often volume buying required to service the commercial business segment lowers the overall cost of the offerings.
>
> The commercial business segment enhances the profit margin of the retail ***market segment***. If the company reduces the commercial business, it could have an adverse effect on the total profit of the company.
>
> Therefore, the decision will likely be to retain the commercial market segment.

As you can see from this simple example, the relationship between market segments can be complex and have many variable factors to consider. It is, therefore, very important that these relationships be analyzed frequently.

You have completed the market research—now you can make some final decisions about the specific offerings with which you will provide your customers. Make those decisions.

Place a summary and conclusion of this analysis in your business plan. The analysis should be placed either in the business plan Appendix or kept in files (filing cabinet or computer).



As already indicated, complete this analysis more frequently than once a year. Possibly, add these other analyses to your business plan as addenda.

Write a detailed description of the offerings (or categories of offerings) you are going to market and place it in your business plan.

> This detailed description should include all the decisions made in the previous sections about your business, your offerings, and your customers/clients that relate to your offerings.

**It should include all the details that are pertinent to the offerings like the:**

| | |
|---|---|
| Exact quality of offerings | Name brands |
| Volume | Names of wholesalers |
| Sizes | Size of inventory |

If you are an existing business, indicate which ones are added, modified or changed from the last business plan. (Use colour for this step.)

Review your description of your market segments in your business plan (***The Customer/client base,*** found in the module, **Market Analysis and Supplier—Keys to success**) and add the following information to each market segment listed.

- Proportions of revenue
- Profits contributed
- Expenses used

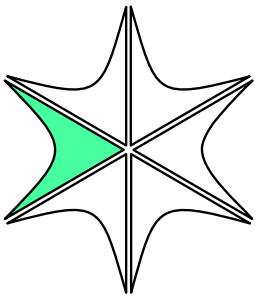
## Uses of the analysis

There are several uses for the offering analysis. Use it to:

1. Assist you in developing goals and results for your business plan
2. Make decisions about retaining or dismissing either market segments or specific offerings
3. Make decisions about adding or modifying offerings or market segments
4. Make decisions of which market segments and offerings your new business will have
5. Write your marketing plan.

## Summary

This section is the final step for a new business in determining what market segments should be targeted and which offerings should be marketed. This section provided the framework for making your final decisions about the offerings your business would market for both the new and the existing businesses.



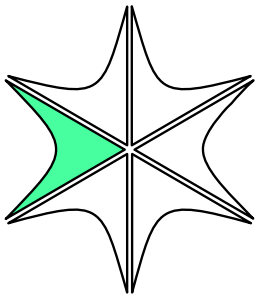
***Celebrate!!***


Now I know how to test my business ideas before implementing them.

# Break-even Point (BEP) Analysis

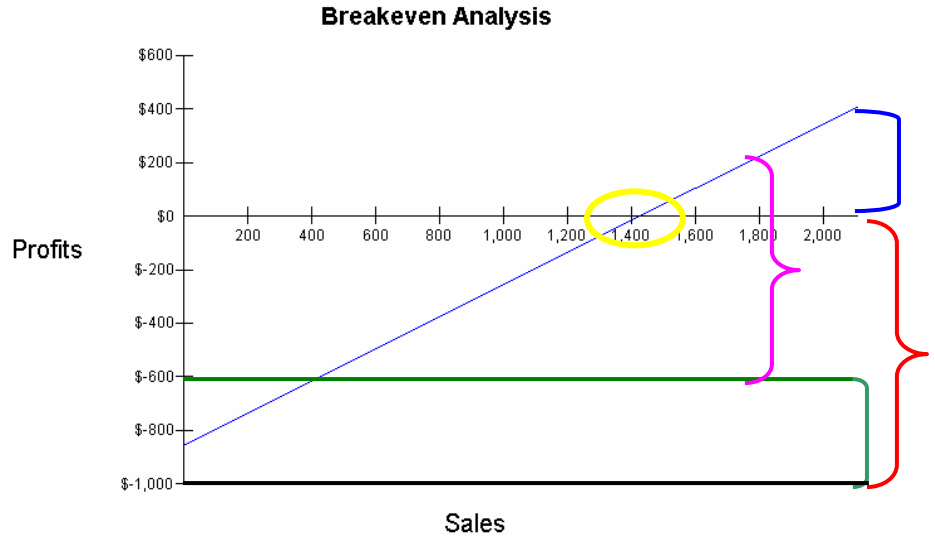
## Introduction to break-even point analysis

The ***break-even point analysis*** is one of the most important tools in assessing the viability of pursuing new ***market segments*** as well as the relative return on investment of various existing market segments.



A ***break-even point (BEP)*** is the point where the business' total costs will just equal its total revenue.

> If you know the break-even point, you have a definite target to shoot for and can put a step-by-step strategic plan together to achieve the goal.




| Legend | |
|---|---|
| **Red** bracket indicates the loss area | **Blue** bracket indicates profit area |
| **Pink** bracket indicates total variable costs | **Yellow** oval indicates the break-even point |
| **Green** bracket and line indicates total fixed costs | |

A break-even point analysis can evaluate possible prices.

Express these objectives in dollars or units of product. A business should do a break-even point analysis frequently. Then, it can be constantly aware of what has to be achieved before the business begins to make a profit.

Certainly, before embarking on new programs or focusing on new markets, consider all the expected costs, and complete a break-even point analysis. Sometimes, what looks like an attractive business opportunity is not so great upon closer examination.

Increased sales do not necessarily mean increased profits. This is because a dramatic increase in sales, or the launch of a new program, may necessitate the purchase of additional equipment or the funding of additional internal or external resources.

The result could be that the 'bottom line' or net profit to the company will stay much the same. In other words, the 'return on investment' (ROI) is not worth the additional expense. Sometimes, this is only a short-term effect and, in the long run, making the investment may be a good decision.

Every business case is different and only the business owners or managers can make that decision. What often happens is the additional investment creates unused capacity in the business; thus, the amount of business required to break-even or reach profit goals is increased significantly.

The break-even analysis helps the business owner or manager to make intelligent decisions when considering new programs or any additional investment in the company.

### *How to use this material*

#### New businesses

Some of the figures you need to calculate the break-even point will have to be estimates. It is often a good idea to use very conservative sales figures and overstate the expenses somewhat.

#### Existing businesses

Some of the figures you need to calculate the break-even point will have to be estimates. It is often a good idea to use very conservative sales figures and overstate the expenses somewhat.

## How to perform a break-even analysis

Calculating the break-even point can be simple for a single offering business, but more complex for multi-line or multi-service businesses. Whatever the complexity, the basic technique is the same.

| ***Formula*** | **Meaning of the formulae** | **Example** |
|---|---|---|
| S = FC + VC | **S = Break-even level of sales in dollars** | $221 = $55 + $166 |
| | **FC = Fixed costs in dollars** | FC = $55 |
| | **VC = Variable costs in dollars** | VC = $166 |

| **Examples of fixed costs are*:*** | |
|---|---|
| Rent | Property tax and insurance |
| Management salaries | Interest on loans |
| Office and administrative expenses | Depreciation |
| **Examples of variable costs are:** | |
| Raw material | Advertising and promotion |
| Labour (wages) and payroll taxes | Expenses for parts |
| Packaging materials | Utilities |
| Outgoing freight | Equipment maintenance |
| Sales Commission | Miscellaneous expenses (office supplies, garbage removal) |

Note that both fixed and variable costs are part of operating expenses and they appear on the monthly operating statement (sometimes referred to as the profit and loss statement). A business selling offerings buys and sells inventory.

Inventory is not part of operating expense. It is accounted for as part of the ***cost of goods sold (CGS)***. The examples that follow show the application of a ***gross margin (GM)*** to the sales price in order to determine break-even points and profit goals.

The methodology is valid in either a fee-for-service business with no inventory or a business selling offerings. However, in businesses with inventory, other accounting issues (for example, inventory, inventory management, and offering turnover) are not discussed here.

## Assignment of costs

Complete the assignment of costs in as much detailed or generally as necessary. However, complete it based on percent of sales (revenue).

**If property tax and insurance were $40,000**

**And the total sales revenue was $600,000**

Then, property tax and insurance represents
$40,000/$600,000 = .066 or 6.6% of sales

In a business that has several divisions or aspects to the business, such as offering sales, a service department, and product installations, it is necessary to assign properly a fair share of the common overhead expenses. This assignment or pro-rating of common expenses is accomplished based on the sales contribution of the different divisions.

***For example***

If the offering sales account is 45% of the total revenue

The service department is 30% of total revenue

And the product installations is 25% of total revenue

Then divide the office and administrative expense of the company in the same proportions between those divisions.

Take this same approach within a department in order to assign costs to a particular major offering group or a special project.

1. In a business where goods are manufactured, raw materials must be acquired and these commodities probably fluctuate in price. Labour costs may vary, and sales commissions or shipping costs may change.
2. In retail or wholesale businesses, the cost of goods sold could increase or a new labour agreement with warehouse staff would increase labour costs. If the public carrier you use has to increase their rates suddenly, it will obviously increase shipping costs and affect the profitability of the business.
3. In a service business, starting a new project or service may require a greater amount of the business' resources than expected. Without careful analysis of the internal and external costs that would be involved, the business could be in for a nasty surprise. Some typical factors to examine are:
    - The extra people necessary
    - The additional resources devoted to servicing the client in the office
    - The additional resources devoted to servicing the client in the field
    - The additional marketing costs to launch a new program
    - The possible increased ***liability*** exposure to the company
    - The possible current and future costs imposed by regulatory agencies
    - To what extent will the new program impact the financial resources and people resources of the company and, for what period?

    Without developing careful estimates of the expected costs and applying a ***break-even analysis*** test, the business could embark on a new program that could prove to be disastrous for the business.

When doing these tests, develop at least three projections:

1. An optimistic result projection
2. An average result projection
3. A pessimistic result projection

## Variations of the break-even analysis

Considering all the variable costs can require detailed analysis and very thoughtful consideration. This is necessary if you really want to know the true ***profit*** picture of the business.

If you are calculating a projected break-even point, you may not know all of the ***variable costs***, that being so, you may want to estimate various scenarios. Prepare an optimistic, an average, and a pessimistic scenario. To perform these, a variation of the break-even formula may be used.

There are at least three variations of the break-even point (BEP) analysis.

### *Variation 1—When the gross margin (GM) is known*

| Formula | Definitions of the elements of the formula | Example |
|---|---|---|
| S = FC+VC/GM | **S = Break-even level of sales in dollars** | S = $2,579.55 |
| | **FC+VC = Fixed and variable costs in dollars** | FC+VC = $227.00 |
| | **GM = Gross margin as a % of sales** | GM = 8.8% (.088) |

In the above example $2,579.55 (S) = $227 (FC+VC) divided by .088 (GM)

**Or, it could also be stated another way, namely:**

**.088 (GM) times $2,579.55 (S) = $227 (FC + VC)**

Therefore, if you know what ***gross margin*** you normally expect to generate, you can test to see whether you can cover basic costs.

You may get this information from previous years' financial statements.

You may also obtain it by consulting industry standards for your type of business.

***Example 1***

Then, based on this historical information and actual percentage to sales relationships of expense items, you can estimate how much gross margin those expenses will likely consume. Equipped with this information, you can now make any necessary adjustments to gross margins or expenses to ensure the profitability of the business.

**In the example above, what we are illustrating is that**

**.088 (the GM) x $2,579.55 (Sales) = $227.00**
**(the sum of the FC+VC)**

If you are selling products, you may translate the dollar ***break-even point*** into units of product by simply dividing by the unit cost of the product.
(See the two examples below)

To arrive at sales objectives for your sales people, you now are able to calculate how many units they must sell before the company starts to make a profit

For some businesses, you may want to extend the exercise to show how many customers are needed to be profitable. See the example that follows.

Here are two examples of using the break-even point analysis formula:

Money needed per year/month for a break-even point

| | |
|---|---|
| FC + VC = Fixed Costs + Variable Costs | **$14,700 per year** |
| GM = Gross Margin | **20.7%** |
| BEP = FC + VC/GM (per year)<br>(BEP means break-even point) | **$14,700/.207 = $71,014.50 (per year)** |
| *BEP per mo. = BEP per year/12<br>(BEP means sales break-even point) | **$71,014.50/12 = $5,917.87 (per month)** |

***Example 2***

Number of customers per day that are needed for a break-even point There may be hundreds of items, all at different prices. This example simply assumes, for illustration purposes, that the average per unit is $3.00 in order that you can determine an approximate number of sales necessary for BEP.

| | |
|---|---|
| If the average unit selling price is | **$3.00** |
| The average customer purchases two times per week | **$6.00** |
| There are 4.3 weeks/month therefore, the average customer sales/month = 4.3 x $6.00 = | **$25.80** |
| BEP = FC/GM (per month) (BEP means break-even point) | **$5,917.87** |
| Consequently, the customers needed for a break-even point are: $5,917.87/$25.80 = $230 x 12 month = $2,760 per year/365 days= | **7.6 customers per day** |

We rounded off the above figures for simplicity. In addition, the example is typical of a business that sells products rather than a fee-for-service business. In a fee-for-service business, the GM percentage would be much higher, perhaps 60% or more and the necessary sales would then drop significantly.

***For example***

$14,700 (expenses)/.60 (GM) = $24,500 (sales)

### *Variation 2—Profit Planning Formula*

The break-even analysis can be adapted to profit planning by simply altering the formula slightly. The basic formula is P = S - (FC+VC)

This formula shows that if you subtract the sum of the ***fixed costs*** and the ***variable costs*** from ***sales***, what is left over is the ***profit*** to the company.

Of course, if S - (FC + VC) = 0, then P in this formula is actually the ***break-even point (BEP)*** because the sales are exactly offset by the fixed costs and the variable costs.

In practice, the profit-planning version of the formula is used when the GM is known or assumed to be at a certain level.

There are several uses of the profit planning formulae:

1. To illustrate the process, refer to our previous Example #1 where we show how a GM of 20.7% of sales is necessary for the business to break-even. Most people would not be satisfied with only breaking even. (GM = gross margin)

   After all, they may have their life savings invested in the business and could probably get a better return on their money by making other investments or simply leaving the money in the bank and drawing interest on it.

2. Let us assume that the owners of the business in Example #1 feel that they should earn a 10% return because that is comparable to what they could earn on their money elsewhere.

| **.31 of the selling price (S) = profit (P) + costs (FC + VC)** | |
|---|---|
| **Formula** | **Example** |
| .31S = P + (FC + VC) | **.31 x $71,014 = P + $14,700**<br>**$22,014.49 = P + $14,700**<br>**P = $22,014.49 – $14,700**<br>**P = $7,314.49** |

### *Variation 3—Pricing product to achieve profit margin goals*

Now that you have established the gross margin necessary to cover costs and achieved the desired profit, how can you easily use this information to properly price products?

The following formula will illustrate this as it applies to the example above:
S - .31S = C

We are saying here that the selling price (S) - .31S = cost of inventory (C)

Hence:

**S - .31S = C**

**.69S = C**

**.69 x $71,014.50 = C**

**C = $49,000**

What we have shown here is that:

**If the GM is 31%, the cost of inventory is $49,000/$71,014.50 = .69 or 69% of the selling price.**

**Accordingly, if .69 divides a cost price of any inventory item, we will know the appropriate selling price to yield the desired GM of 31%.**

**The formula is S = C/.69**

The formula presented here is useful in maintaining selling prices at levels consistent with the levels of GM percentage yield desired. This approach is also consistent with the way in which to show the financial data on the business operating statements.

The profit-planning formula is a useful tool in determining what sales are required to achieve a desired profit goal.

You can see how useful and important the break-even point analysis and the related formula are to daily operations and to business planning. There are many ways to use this technique and we have only discussed a few here.

***For example,***

If you were thinking of making a significant capital investment in the business, you might apply the above formulas to:

- ➔ Project a worst-case business scenario
- ➔ Project a best-case business scenario
- ➔ Project a most probable case scenario for your future business

After consultation with your accountant, and performing a break-even point analysis, you may decide to lease that expensive piece of equipment rather than buy it. Be creative and use the break-even point analysis in areas of the business other than sales. You often have more control over expenditures than you do over sales.

A break-even point analysis is helpful but do not follow it blindly. It is useful for analyzing costs and for evaluating alternatives. The prudent business owner or manager should also relate any analysis to a 'gut feeling' for the needs of the marketplace.

## Points to consider when using break-even analysis and related formulae

1. The break-even point analysis does not consider the effect of price on the quantity that customers/clients will want (the demand curve). It evaluates whether the company will be able to break-even with a particular price, on a specific offering, at a particular point in time.
2. Base the factors used in the formulae on historical data. The marketplace is unpredictable and conditions can, and do, change very rapidly. Thus, although break-even analysis and the related formulae are very useful tools, the business owner or manager must use them in relation to her/his best estimate of the changes in market conditions.
3. Sudden increases in operational costs can influence profitability.
4. Sudden increases in offering cost prices can necessitate big increases in pricing that may result in plummeting sales.
5. Unexpected consumer demand may result in shortages of supply or the need to commit greater resources to customer service. In either event, the impact on profitability could be significant.

6. The business may suddenly be confronted with extremely strong price competition, which could drive prices down and affect profits.
7. It is a good idea to get in the habit of testing and monitoring the performance of the business on, at least, a quarterly basis.

Risk assessment and break-even analysis should be part of any business plan along with the development of contingency plans in case of 'the worst-case scenario' occurring.

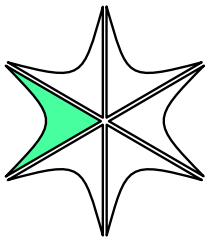
## Uses of the break-even analysis

The break-even analysis can to be used to:

1. Evaluate possible prices of the various product lines
2. Monitor the viability of existing business segments
3. Assess the viability of pursuing new market segments
4. Assess the relative return on investment of various existing market segments
5. Test the effect of changing market conditions on business segments
6. Test the viability of any expansion plans such as adding new equipment or entering a new market
7. Assess after adding additional production equipment
8. Assess after increasing staff for any reason
9. Assess if there are sudden increases in fees, licences, or taxes from government or regulatory agencies
10. Assess after—increasing marketing costs to promote an offering.
11. Assess after—increasing marketing costs to service a new market.

## Summary

In this section, you have learned how important break-even analysis is as a business-monitoring tool. We have discussed variations of the break-even analysis and examples of how to use them within the business. We have shown how to use the break-even analysis and its variations:



- Test the feasibility of new business ventures and offering introductions
- Test the effect of changes in market conditions
- Price offerings at a profitable level

If you are preparing an internal business plan, the next step is to prepare:

- ***Pro-Forma*** Cash Flow Statements (found below)
- Operating Statements

These will forecast the actual results in detail for the next year's operations and include summary projections for at least the following two years. We will outline what is necessary in the next section.

***Celebrate!!***

# Preparing Pro-Forma Cash Flow Statements

## Introduction

Sometimes, Pro-Forma Cash Flow Statement is labelled a Cash Flow Projection or simply a Cash Flow Statement. We will use a Pro-Forma Cash Flow Statement in this section.

Effective cash flow management is essential to the continued health and survival of any business.

**Good cash flow management assists in:**

- Financial planning
- Inventory purchases
- Formulating credit and collection policies
- Renewing business lines of credit
- Making an effective presentation to your lender
- Keeping on top of operating capital needs
- Providing early indications of when expenses are getting out of line

### *What exactly does the pro-forma cash flow statement do?*

A pro-forma cash flow statement compares projected income and expenses with actual income and expenses on a monthly basis throughout the fiscal year.

> It is one of the most effective tools that an owner or manager has to control their business. When asked how they manage their cash flow, many small business people will admit that they really don't have a formalized plan.
>
> They will often say that they 'sort of know' or 'they have a feel' for the seasonal changes in their business and cut back or make adjustments accordingly.

Comparing the actual cash flow of the business to a 12-month cash flow projection can reveal any sudden changes that have occurred in your expenses and the effect that may have on your current and future cash position.

> Good cash flow management can take a lot of pressure off the business. The cash flow projection is simply a budgeting tool that, if used properly, can smooth out the highs and lows in your business because of cyclical or seasonal changes.
>
> It is not a cure-all, but it does help to give a sense of direction and, along with a written business plan, clears the mind for more productive and creative thinking.

## *How to use this material*

### New Businesses

For a new business, the Pro-Forma Cash Flow Statement is a particularly important part of the business planning process. After testing the feasibility of the business ***offerings*** using ***break-even analysis***, the ***Pro-Forma*** Cash Flow Statement projects the result of that analysis over a 12-month period. Spotting fluctuations in cash flow is easy on the spreadsheet.

**The business owner or manager may then**

Anticipate the need for adjusting expenses
Arrange for a term loan
Arrange for a line of credit

Having sufficient capital and financing at the beginning of the business is essential to the success of the new business.

Each month, compare the actual cash flow performance of the business to the projected results. By critically examining any major differences, a business manager can identify areas where to make adjustments before the business is seriously damage.

### Existing Businesses

The Pro-Forma Flow Statement is just as important for the existing business. However, the existing business has the benefit of business history and, therefore, the projected figures should be a more accurate estimate of the expected business performance.

The existing business will use the Pro-Forma Flow Statement to forecast the effect on the business of:

- Adding products or services to the business
- Addition of personnel
- A change of location
- Increases in taxes

Consult the Pro-Forma Cash Flow Statement every month to monitor and compare actual and projected results. This is an essential part of good business management and planning.

## How do you prepare a Pro-Forma Cash Flow Statement?

In this section, you will move step-by-step through the process of preparing a pro-forma cash flow statement. You will be using the following three spreadsheet forms in this process:

1. Projected Cash and Accounts Receivable
2. Projected Accounts Payable
3. Pro-Forma Cash Flow Statement

To simplify the illustration, the example used will be the format used for a fee-for-service business. That is a business where revenue is not derived from the sale of products but rather is generated from fees for work performed.

In these businesses, total sales revenue is derived from the services provided to the customers/clients.

In a business selling products, deduct the cost of the product and all the directly related expenses from the selling price in order to determine the net revenue or income derived from sales.

***Examples of people in this type of business are:***

Lawyers
Accountants
Health professionals
Security services
Consultant
Personnel services
Real Estate
Delivery service

In other words, in a business selling products Net Sales Revenue is the selling price less the Cost of Goods Sold. The details of doing this calculation are demonstrated on the Income Statement of the business. We will not be dealing with the Income Statement in this section.

A Pro-Forma Cash Flow Statement (Cash Flow Statement) is only concerned with the net cash receipts and expenditures of the business.

### *Steps in preparing a Pro-forma Cash Flow Statement (Cash Flow Statement)*

There are nine steps in the pro-forma cash flow statement process. They are:

1. Estimate sales and fees-for-service.
2. Estimate your revenue received from Accounts Receivable.
3. Decide how much of your business will be for cash or thirty day terms.
4. Repeat the same process as 1–3 only for expense items.
5. Accounts Payable planning is related closely to expected revenues.
6. Enter the estimated total cash received and estimated total expenses on the Cash Flow Worksheet.
7. Fill in all other estimated income and expense items on the Cash Flow Worksheet.
8. Calculate the total Cash In and Cash Out for each month and enter the surplus or deficit on the Worksheet.
9. Enter the opening Cash balance in the first month and carry this forward in each months calculation to arrive at the 'actual surplus or deficit'

The nine steps are explained in detail below. You may find it necessary to print either the set of directions and/or the three spreadsheet forms (*See below*) hence, you can relate the instructions to the worksheet.

**Please note**

The reference on the Projected Cash and Accounts Receivable worksheet to 'Enter on line 1'

'Enter on line 2' refers to specific lines on the following Pro-Forma Cash Flow Statement where the summary information is to be entered.

In addition, the reference on the Projected Accounts Payable worksheet to 'Enter on line 22' refers to the specific line on the following Pro-Forma Cash Flow Statement where the summary information is entered.

1. First, estimate the Sales or Fees-for-Service for each month of the fiscal year. Factor into these seasonal variations or changes what you expect in the business cycle.

   The previous year's results can be a forecasting guide but you may want to apply other standards.

***For example***

Use the conservative forecasts if you are in, or expect to be entering, a recession period.

On the other hand, use an optimistic forecast if you are in a growth period or, expect to be entering a growth period.

However, most of the time, the middle-of-the-road approach is the best. These figures are entered on a spreadsheet

(See example below–Projected Cash and Accounts Receivable)

2. Next, estimate your revenue received from the Accounts Receivable for each month of the fiscal year.

   To do this, include:

   What you would usually expect to receive from the previous month's Sales/Fees

   What you would expect to receive from 60-day accounts

   What you expect to receive from all Sales/Fees before 60 days

   Total these figures and enter them on the Projected Cash and Accounts Receivable spreadsheet.

3. Decide how much of your business will be for cash or thirty-day terms, and how much will be carried for longer terms.

> ***For example***
>
> If, your business has been 10% cash/30 days and 90% longer credit terms it likely will remain the same if you don't plan to make changes to your credit policies.
>
> If, however, this is obviously putting a strain on the business and you don't wish to increase your operating loan, you may well want to review your credit policies.
>
> You have to decide whether the cost of carrying the additional business on account is worth it.

4. Now, you do the same exercise for your expenses and prepare a spreadsheet if your business involves the purchase and resale of products. (See example below–Projected Accounts Payable)

> ***For example***
>
> First, estimate the purchases you plan to make each month and enter the figures.
>
> Then estimate the payments normally made on purchases made on the current month's purchases, the payments normally made on the previous month's purchases, the payments normally made on 60-day purchases and, finally, the payments usually made on purchases over 60 days.
>
> Total the Accounts Payable and enter this on the spreadsheet.

5. Complete Accounts Payable planning in close relationship to the revenues expected from Sales/Fees.
6. Now that you have, your total cash received and cash payments estimated, go to your Pro-Forma Cash Flow Statement, (See example below) and enter your totals.

***For example***

Very favourable payment terms at very low or no interest can ease the burden on the business and the expense of each month's payment is reflected in the month that it will be paid.

If, however, a large purchase is made at a special price but must be paid for now, it may not be a good deal if the goods will not be used up for several months.

A very rough 'rule-of-thumb' would be, don't buy more than you need for the next 60 days unless you are getting an additional 5% discount for each additional month you will carry the product.

For example, if you were not going to use the product up for 6 months, you would need at least a 20% discount to make the same Net Profit.

7. Your next step is to fill in all the other items related to income and expense.

| Under Income is | Under Expenses is | Other Operating Expenses |
|---|---|---|
| Loan proceeds–this is the monthly amount received from the operating loan and will be filled in last<br>Sale of Fixed Assets<br>Other Cash Received | **Rent**<br>**Management Salaries**<br>**Other Salaries and Wages**<br>**Legal and Audit Fees**<br>**Utilities (heat, light, water)**<br>**Telephone**<br>**Repairs and Maintenance**<br>**Licences and Municipal Taxes**<br>**Various kinds of insurance** | Payments on Purchases of Fixed Assets<br>Interest paid on loans (short-term loans, lines of credit, overdrafts)<br>Payments on Mortgages/Term Loans<br>Income Tax Payments<br>Cash Dividends Paid<br>Payments on Accounts Payable<br>Other Cash Expenses |

8. When all of this data is entered, you should now calculate your **Total Cash In** and the **Total Cash Out** for each month throughout the fiscal year and determine in which months there may be a cash surplus or deficit.

9. Enter the amount of your business opening cash balance in the first month of your fiscal year and carry this forward through your calculations to arrive at the 'actual' projected surplus or deficit each month.

   This figure is, therefore, an estimate of the least amount you will require as an Operating loan to run your business. For now, enter this amount under Loan Proceeds in the Cash In section in order to balance the statement.

   Once this is completed, you are prepared, along with your financial statements and your business plan, to meet with your Lender.

Each month, you will enter the actual figures for the items listed on your worksheet. The items will vary somewhat with the business and this is only an example.

Communicate closely with your Lender and make them aware of any significant changes, particularly if it may affect your need for operating capital.

A well-informed Lender can be a powerful resource. However, frequently you hear small businesses complaining about the support of their Lender. Usually, if the truth were known, the real story is that business owners do not do their homework and provide their Lender with the detailed information that is needed.

### *Pro-forma Cash Flow Statement*

Now you have a projected Pro-Forma Cash Flow Statement.

The pro-forma cash flow statement has columns to show the projected income and expense for each month of the fiscal year and blank columns beside each month's projection to record the **actual figures,** as they become known.

The projected figures are your one-year operating budget. Careful analysis of any deviations from this budget can help to minimize expenses and maximize profits—referred to as doing a Budget Deviation Analysis.

It only takes a few hours each month to review and it should be a regular part of your business management activity. It is easy to forget to do some of these business planning and direction activities when times are good and the business is flying high. Nevertheless, Budget Deviation Analysis is an essential part of effective business management.

Perform a budget Deviation Analysis on a monthly basis to be meaningful and useful. If a business has several projects 'on the go' at one time, it may be a good idea to devise separate budgets for each project.

This is one of the best sources of current operating information for your business and, if the budgets have been prepared carefully and thoughtfully, the Budget Deviation Analysis will tell you at a glance, which parts of your business, are getting out of control. Experience will teach you what deviations are significant and what magnitudes of variances are important.

Carefully and critically examine any changes, whether positive or negative, and the reasons for it determined.

If the change is negative, then implement a corrective plan of action. If the change is positive, then you should ask yourself:

With a little digging, you may discover something that, if controlled and directed, could have a major impact on the future profitability of the company.

### *Suggestions and tips*

While doing your Pro-Forma Cash Flow Statement for the month, it is important to cast your eye back upon previous months to identify any trends or offsets. A review and analysis of any monthly fluctuations will often reveal:

- The negative deviation in one month is offset by a positive deviation in the following month
- Seasonal fluctuations or business cycle factors that are, perhaps, because of the variable timing of projects

With experience, budgeting and analysis will become more exact and you will have greater control over the profitability of your business. All financial control documents should be adapted to the needs of your business in terms of the items included and the degree of detail, but the format should adhere to generally accepted accounting principles. Your accountant will help you in this area but, you must be the one to decide what information is most useful to you in running the business, and what information reflected by the Budget Deviation Analysis is most significant.

Below are samples of:

1. Projected Cash Sales and Accounts Receivable
2. Projected Accounts Payable
3. Pro-Forma Cash Flow Statement (Worksheet)

.

| | | Projected Cash and Accounts Payable | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Month** | **Jan.** | **Feb.** | **Mar.** | **Apr.** | **May** | **June** | **July** | **Aug.** | **Sept.** | **Oct.** | **Nov.** | **Dec.** |
| Projected Sales | $10,000 | | | | | | | | | | | |
| Cash Sales (line 1) | $9,500 | | | | | | | | | | | |
| Coll. Of Sales 1 mo. Prior | $5,000 | | | | | | | | | | | |
| Coll. Of Sales 2 mo. Prior | $2,000 | | | | | | | | | | | |
| Coll. Of Sales Over 2 mo. | $500 | | | | | | | | | | | |
| Total Accts. Rec. (line 2) | $27,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | Projected Accounts Receivable | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Month** | **Jan.** | **Feb.** | **Mar.** | **Apr.** | **May** | **June** | **July** | **Aug.** | **Sept.** | **Oct.** | **Nov.** | **Dec.** |
| Planned Purchases | $2,000 | | | | | | | | | | | |
| Pay On Current Mo. Purch. | $1,000 | | | | | | | | | | | |
| Pay On Purch. 1 Mo. Prior | $200 | | | | | | | | | | | |
| Pay On Purch. 2 Mo. Prior | $200 | | | | | | | | | | | |
| Pay On Purch. Over 2 Mo. | $100 | | | | | | | | | | | |
| Total Accts. Payable(line 22) | $3,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | Pro-Forma Cash Flow Statement | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Income (Cash Only)** | | | | | | | | | | |
| | | | | | | | | | | |
| **Month** | **January** | **January** | **February** | **February** | **March** | **March** | **April** | **April** | **May** | **May** |
| | ***Planned*** | ***Actual*** | ***Planned*** | ***Actual*** | ***Planned*** | ***Actual*** | ***Planned*** | ***Actual*** | ***Planned*** | ***Actual*** |
| 1.Cash | | | | | | | | | | |
| 2.Collection from Accounts Receivable | | | | | | | | | | |
| 3.Loan Proceeds | | | | | | | | | | |
| 4.Sale of Fixed Assets | | | | | | | | | | |
| 5.Other Cash Received | | | | | | | | | | |
| 6.**Total Cash In** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | |
| 7.Rent (for premises, equipment, etc.) | | | | | | | | | | |
| 8.Management Salaries | | | | | | | | | | |
| 9.Other Salaries and Wages | | | | | | | | | | |
| 10.Legal and Audit Fees | | | | | | | | | | |
| 11.Utilities (heat, light, water) | | | | | | | | | | |
| 12.Telephone | | | | | | | | | | |
| 13.Repairs and Maintenance | | | | | | | | | | |
| 14.Licences and Municipal Taxes | | | | | | | | | | |
| 15.Insurance | | | | | | | | | | |
| 16.Other Operating Expenses | | | | | | | | | | |
| 17.Payments on Purchases of Fixed Assets | | | | | | | | | | |
| 18.Interest Paid on Loans | | | | | | | | | | |
| (short-term loans, lines of credit, overdrafts) | | | | | | | | | | |
| 19.Payments on Mortgages/Term Loans | | | | | | | | | | |
| 20.Income Tax Payments | | | | | | | | | | |
| 21.Cash Dividends Paid | | | | | | | | | | |
| 22.Payments on Accounts Payable | | | | | | | | | | |
| 23.Other Cash Expenses | | | | | | | | | | |
| **24.Total Cash Out** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **25.Surplus or Deficit** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (subtract cash in minus cash out) | | | | | | | | | | |
| **26.Opening Cash Balance** | | | | | | | | | | |
| **27.Closing Cash Balance** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

***Celebrate!!***

Now I know how to save money.

## Other products and modules for sale

Other modules available on this site deal specifically with aspects of business planning research and analysis. For a complete, in depth treatment of business planning go to the BizBite Consulting Group products—***The Business Plan***.

All of the business testing formulae presented in this module are available in Interactive form in our product 'Interactive Excel Workbooks'. In the workbooks, you can insert your own figures in the various formulae and the calculations are automatically completed for you. You simply follow the directions on the title page of the Workbooks.

For detailed information on the content of these products, please go to ‘Product’ on the menu bar on the web site.

# Glossary of Terms

**Break-even point (BEP)—**the sales quantity where the firm's total cost will just equal its total revenue.

**Break-even point formulae**—(S = FC + VC)(FC + VC = Fixed Costs + Variable Costs)

**Break-even analysis**—an approach to determine whether the firm will be able to break-even that is, covers all its costs with a particular price.

It is a method to determine the point at which business will neither make a profit nor incur a loss. That point is expressed either in the total dollars of revenue exactly offset by the total of the fixed and variable expenses or, in total units of production, the cost of which exactly equals the income derived by their sale.

**Cost of goods sold *(CGS)*—**appears on the operating statement, which is sometimes called either the Net Income Statement or the Profit and Loss Statement. Adding inventory purchases during the accounting period to the beginning inventory and then subtracting the ending inventory for the period arrive at the CGS.

**Fixed costs—**fixed costs are those costs not associated with, or the result of, the acquisition and sale of business ***offerings***.
Examples: mortgage payments, rent, light, heat, and taxes

**Gross margin (GM)—**the money left to cover the expenses of selling the offerings and operating the business. Same as Gross Profit Margin defined below.

**Gross profit margin**—the difference between revenue and the cost of goods or services sold.

**Liability**—is money owed by individuals or companies.

**Offerings**—the products and services that a business provides its clients/customers

**Profit**—a business' earnings after paying all expenses.

The excess of the selling price over all costs and expenses incurred making the sale. In addition, the reward to the entrepreneur for the risks assumed in the establishment, operation, and management of the business enterprise

**Pro-forma**—a projection or estimate of what may result in the future from actions in the present. A Pro-Forma financial statement is one that shows how the actual operations of the business will turn out if certain assumptions are realized.

**Revenue or sales**—are the dollars you receive for the offering you sell.

**Total costs**—is the sum of the total fixed and ***total variable costs***. The ***total fixed costs*** cannot remain the same because the ***total variable costs*** change.

**Total fixed costs**—is the sum of those costs that are fixed, no matter how much is produced. These expenses that remain constant no matter what the sales or fees from services are.

**Variable costs—**variable costs are business costs related to the acquisition and resale of offerings or the production of goods and services

The end