



# Guide to Cost Estimating for a First-Year Business Plan

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**Las Vegas, Nevada**



## Estimating Costs

It is impossible to accurately estimate the exact costs of operating an imaging cartridge business. First-year estimates are the most difficult because there is no cost history to use. However, it is essential to a business plan to make the best estimates possible of costs for the first year. Bad cost and income estimates can be the major weaknesses in first-year business plans.

This guide will outline a method for estimating costs with reasonable accuracy without becoming a full-time bean counter. The method is not perfect, but it is typical of the approaches used by start-up cartridge businesses. So, find some paper, two #2 lead pencils and a calculator, and let us begin!

### Approaches to Cost Categorization

There are a couple ways to categorize costs. It is essential to understand them.

*Direct and Indirect Costs:* This is best explained as separating those costs that are directly attributable to remanufacturing a specific cartridge from those expenses that are necessary—but not directly tied to producing it.

- *Direct costs* are expenses that can be directly tied to remanufacturing a cartridge such as toner and other parts and supplies, or the wages and fringe benefits of the people who actually work on the cartridge, such as the technician, quality assurance tester, packager, etc. These are costs directly attributable to doing business. They are the costs of producing a product.
- *Indirect costs* are expenses that are not directly tied to the remanufacture of a specific cartridge, but are necessary to its remanufacture. Typical indirect costs include the costs of rent, insurance, telephone, Internet and postal charges, advertising, etc. They are considered administrative costs. They are the costs of being in business.

Another way to categorize costs is:

*Fixed and Variable Costs:* Separate costs that are constant regardless of how many cartridges you remanufacture and sell and costs that change with increases or decreases in cartridges remanufactured or sold.

- *Fixed expenses* are stable. Examples are salaries and fringe benefits, rent, heat and light (utilities), office machine purchases, etc.
- *Variable costs* change with business activity, such as supplies costs, waste removal, delivery costs, etc.

### Why Bother?

If you know your fixed costs, you know the bare minimum of income or cash you will need in reserve to keep the doors open. The real bottom line is nice to know when starting a business.

If you know how to derive both direct and indirect costs, you can compare the various business models in terms of how they apply your investment in order to turn a profit. If you know the fixed and variable costs of operation, you can perform a break-even analysis to determine the dollar level of sales, or number of cartridge sold, at which your business will become profitable. You probably want to pass the break-even point as early in the business year as possible.

The First Year Expense Worksheet lists important estimates to include in your business plan. These figures will be your financial guideposts.

### *FIRST YEAR EXPENSE WORKSHEET*

Personnel wages:	\$	
Management:	\$	
Administration:	\$	
Supervision:	\$	
Production:	\$	
Sales and service:	\$	
<b>TOTAL</b>	<b>\$</b>	

In many small business start ups, one or two people may perform all of the above functions. It is not uncommon for owners to take no salary for periods of time. Their contributions are called *sweat equity*.

#### *Required and Optional Benefits Employer Contributions*

Social Security	\$	
FICA	\$	
Unemployment	\$	
Other	\$	
<b>TOTAL</b>	<b>\$</b>	

#### *Facility/Space Expenses*

Rent	\$	
Insurance	\$	
Deposit	\$	
Utilities	\$	
Janitorial	\$	
Waste removal fee	\$	
Snow removal/other	\$	
Signage	\$	
<b>TOTAL</b>	<b>\$</b>	

If you are using a property you already own to avoid many of these costs, remember to get business insurance. It is essential.

#### *Legal Expenses*

Incorporation		\$ _____
Contract reviews	\$	
Business license	\$	
Retainer	\$	

Other  
**TOTAL**

\$ \_\_\_\_\_  
\$ \_\_\_\_\_

*Advertising Expenses*

Commercial printing	\$ _____
Radio advertising	\$ _____
Portable signage	\$ _____
Cable/TV	\$ _____
Circulars	\$ _____
Postage	\$ _____
Other	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>

*Delivery Expenses*

Company vehicle	\$ _____
Employee vehicle	\$ _____
Delivery services	\$ _____
Other	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>

*Professional Expenses*

Int'l ITC membership	\$ _____
Publications	\$ _____
Meetings/Conferences	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>

**Contractual Expenses**

Bookkeeping	\$ _____
Accounting	\$ _____
Temp. service	\$ _____
Security	\$ _____
Janitorial	\$ _____
Other	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>

*Tools & Equipment*

Remanufacturing tools	\$ _____
Hand tools	\$ _____
Fixtures	\$ _____
Vacuums	\$ _____
Dump stations	\$ _____
Ink refillers	\$ _____
Test equipment	\$ _____
Test printers	\$ _____
Printer tool kit	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>

*Office Equipment*

Telephone(s)	\$ _____
MFP	\$ _____
Printer	\$ _____
Copier	\$ _____
Fax	\$ _____
PC/MAC	\$ _____

Postage meter	\$ _____
Shipping scale	\$ _____
Printing calculator	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>

*BIZ Software*

Office suite	\$ _____
Accounting	\$ _____
Inventory	\$ _____
Cross-reference	\$ _____
Customer database	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>

*Laser Cartridge Remanufacturing Supplies*

Supply of empties	\$ _____
Toners	\$ _____
Micro-chips	\$ _____
Drums	\$ _____
Wiper blades	\$ _____
Developer blades	\$ _____
PCRs	\$ _____
Mag sleeves	\$ _____
Bushings/bearings	\$ _____
Seals	\$ _____
Labels	\$ _____
Misc.	\$ _____
Shipping boxes	\$ _____
Shipping bag	\$ _____
Packing materials	\$ _____
<b>TOTAL:</b>	<b>\$ _____</b>

SHIPPING \$ \_\_\_\_\_

**TOTAL + SHIPPING** **\$ \_\_\_\_\_**

If your business model is to be primarily a reseller, you will have little or no remanufacturing supplies/equipment costs.

*Cartridges Available for Immediate Sale (Purchased)*

Laser Cartridges

	<u>OEM</u>	<u>REMAN</u>
HP	\$ _____	\$ _____
Lexmark/Dell	\$ _____	\$ _____
Sharp	\$ _____	\$ _____
Canon	\$ _____	\$ _____
Samsung	\$ _____	\$ _____
Minolta	\$ _____	\$ _____
Epson	\$ _____	\$ _____
Other	\$ _____	\$ _____
Totals	\$ _____	\$ _____
<b>TOTAL:</b>	<b>\$ _____</b>	<b>\$ _____</b>

SHIPPING \$ \_\_\_\_\_

**TOTAL+SHIPPING \$ \_\_\_\_\_**

Ink Cartridges

	<u>OEM</u>	<u>REMAN</u>
HP	\$ _____	\$ _____
Canon	\$ _____	\$ _____
Epson	\$ _____	\$ _____
Dell	\$ _____	\$ _____
Others	\$ _____	\$ _____
Totals	\$ _____	\$ _____
<b>TOTAL:</b>	<b>\$ _____</b>	<b>\$ _____</b>

SHIPPING \$ \_\_\_\_\_

**TOTAL+SHIPPING \$ \_\_\_\_\_**

**Some Considerations**

If your business model is to be primarily a remanufacturer, you will have fewer expenses related to cartridges purchased from other industry sources.

The First Year Expense Worksheet is a rather complete listing of the costs you may incur in starting and operating your cartridge business. However, you will not have all of the expenses. Some you will add gradually over time and some will be with you from day one.

It is best to design your business first and then cost it out rather than to start from a total amount available and work backwards. You may make the budget, but the business may never fly.

Once you enter all of the first-year costs according to your business model, go back to the definitions and categorize them as being either direct or indirect and fixed or variable costs on the worksheets that follow.

Use the definitions given above to decide the category for each cost. We have added some Internet sites at the end of this guide for additional help if needed. We also have listed Internet locations where you can find prices on equipment, tools, software and other objects of cost.

You will need to enter on the Fixed Cost Worksheet the name of the item, its estimated dollar value and the source from which you derived the estimated costs.

*FIXED COSTS WORKSHEET*

List the costs you have even before you make your first cartridge or buy your first cartridge to resell. *Think of them as the costs of being in business ready to do business.*

<u>Item of Cost</u>	<u>Value</u>	<u>Source of Cost</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____





**Total Estimated Variable Costs: \$** \_\_\_\_\_





_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**Total Estimated Indirect Costs: \$** \_\_\_\_\_

If you have experience creating spreadsheets, creating a costing spreadsheet will be no challenge. They also are part of many software accounting packages. By working with these costing forms, you will be forced to consider the impact of each one upon the business model you will implement in your business plan.

Remember, the work that goes into creating a solid business plan is at least as important as the plan itself.

**A Look at Business Income**

Businesses in this industry are creative. They derive income from a variety of products and services. Your business can be, or become, as simple or as complex as you want it to be.

How many of these sources of earned income are part of your business plan? How much income from each do you estimate?

- Sale of cartridges you remanufacture \$ \_\_\_\_\_
- Sale of cartridges you purchase and resell \$ \_\_\_\_\_
- Sale of empty toner/ink cartridges \$ \_\_\_\_\_
- Sale of office supplies \$ \_\_\_\_\_
- Printer cleaning services \$ \_\_\_\_\_
- Printer maintenance/repair services \$ \_\_\_\_\_
- Printer network installation \$ \_\_\_\_\_
- Printer cost-per-page consultation \$ \_\_\_\_\_
- New printer sales \$ \_\_\_\_\_
- Refurbished printer sales \$ \_\_\_\_\_
- Printer disposal \$ \_\_\_\_\_

**TOTAL**

\$ \_\_\_\_\_

The more of these income sources you include, the more costs you must include in the plan as well.

**Analysis Tools**

But how do you know which products and services will be profitable for you and how profitable each one will be? There are some simple tools you can use to estimate their contribution to the profitability of your business. Interestingly enough, the first of these is called "Unit Contribution."

Now that we captured the estimated costs and categorized them, we need to justify the time and effort. To do so we will use a few simple tools such as Unit Contribution.

***Unit Contribution = Selling Price minus Variable Costs***

Price = Price you charge

Variable Costs = Costs that change with units sold (a cartridge) or a service (a printer cleaning).

*Example of Unit Contribution:*

Your selling price for a particular cartridge is \$79.00.

Your Variable Costs: For this example, the costs to prepare the cartridge for sale are \$16.90.

Unit Contribution = \$79.00 - \$16.90 = \$62.10

The \$62.10 is then available to apply against the fixed costs of your business.

When those costs are covered by the combined unit contributions of each product and service you sell, your business reaches the break even point. Each Unit Contribution from then onward becomes profit!

*Average Unit Contribution*

Each cartridge, or cartridge model, will not have the same amount of parts replaced or take the exact same amount of labor. Drums, toners, etc. for each model also will not cost the same.

Nor, will your selling price be the same for every cartridge model. So, for purposes of estimation, you must develop:

- Average Selling Price
- Average Variable Cost
- Average Unit Contribution

Here is an opportunity to make your investment in planning pay big first-year dividends. This is the time to determine the optimal mix of goods and services possible in your area to optimize both sales volumes and unit contributions so that the business becomes profitable as soon as possible and earns the greatest profits possible.

Sound good?

Microsoft Office 2003 has a feature called "Problem Solver" that remains a secret to most of us. However, it is a gold mine. Go to the web and enter the following into your browser:

<http://office.microsoft.com/en-us/assistance/HA011245961033.aspx?mode=print>

The information here will teach you to build a spreadsheet that you can use to determine the most profitable mix of cartridges possible. This information then can be used in your sales planning and advertising.

When you finish, go back to the *Guide to Preparing a Business Plan* to complete your business plan.