

QuickFill® Application Notes

How to Calculate if a Promotional Mailing Pays Off

The question of how much to spend on marketing to increase circulation can lead to a lively debate among publishers. Suppose, for example, you make a test mailing to a new list and get a response rate of 0.65 percent. Should you make a follow-up mailing, or is the response too low? What response rate do you need to break even on a mailing?

In this issue of *Application Notes*, we tell you one way to find the answer. We've also enclosed a CD with a software program — a "Breakeven Calculator" — that helps answer this question.

We developed the calculator many years ago and have continually refined it since that time. Over the years, a variety of publishers have used it successfully to make marketing decisions for literally hundreds of publications. (The calculator was designed for publications that carry no advertising, but, as you'll see, you can easily adapt it to account for advertising income.)

We'll tell you more about the calculator — and how to use it — shortly. But first let's take a look at some of the assumptions that lie behind it.

What is an Order Worth?

Suppose I find a filled-out order card for your publication lying on the ground next to a mailbox. Since I'm not too nice a fellow, I walk into your office and ask how much you'll give

me for the card. You badly want the order, so you decide to ante up. Before you do, however, you must figure out the most you can afford to pay and still make a profit on the transaction.

The calculator is more complicated than it might seem at first. Obviously, the answer depends on the price you charge for your publication and the costs you incur to get it out. But which costs? Should you include the fee you paid a copywriter to write your promotional piece? How about the printer's bill? What about the salary you pay your editor? And should you add in only your first year's profit or take future years into account?

What Are My Marginal Costs?

The easiest way to see which costs you should include is to consider what happens when you gain one extra subscriber. Some of your costs will go up; others will remain the same. The fee you pay your copywriter, for example, and your editorial expenses will stay the same. But the cost for postage for one issue will rise by 25 cents.

Other expenses aren't as easy to categorize. The cost of printing your issues increases when you print more copies — but not by the average cost of printing one copy. What do we mean? Here's an example:

Say your printer quotes you a price of \$750 for 2,000 copies, plus \$7.50 per hundred for each additional hundred copies. When you print 2,000 copies, your average cost per copy comes to 37.5 cents (\$750 divided by 2,000). When you print 2,100 copies, your average cost falls to 36.1 cents (\$750 plus \$7.50, or \$757.50, divided by 2,100).

However, since you're already printing 2,000 copies, the *additional* hundred copies cost only 7.5 cents each (\$7.50 divided by 100). This last amount is the extra printing cost you incur when

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Postmaster: Send address changes to QuickFill Application Notes, 10 Riverside Drive, Suite 104, Lakeville, MA 02347.

Cost	Total	Average	Marginal
Editorial	\$50,000	\$25.00	\$0.00
Marketing	25,000	12.50	N/A
Type & Printing	12,000	6.00	0.90
Fulfillment	12,000	6.00	5.00
Total Direct	99,000	49.50	5.90
Overhead	30,000	15.00	1.77
Total	\$129,000	\$64.50	\$7.67

Table 1
Annual costs for 2,000-circulation newsletter

you add a single subscriber, and it is one of your *marginal costs*.

You apply this same principle to all your other variable expenses to figure out the total marginal cost of producing and shipping a single extra copy. Then you use this total to calculate the value of an order — that is, the amount you can afford to pay for an additional subscriber and still break even.

Table 1 shows typical annual costs — broken down by average and marginal costs — for producing a newsletter with a circulation of 2,000. (The average cost, of course, is simply your total cost divided by the circulation.)

Let’s take a closer look at the figures in Table 1. You have no marginal cost for editorial. This is a fixed expense; it doesn’t change as your circulation grows or shrinks. We also didn’t include a marginal cost for marketing. It wouldn’t make sense to do so, since our goal is to figure out how much we can afford to spend to obtain one extra subscriber.

Notice that the marginal cost of type and printing is much lower than the average cost. That’s because most of the printer’s bill — unless you have a very large print run — is for the cost of preparing the press. Only a small portion is for paper, ink, and the actual time spent running the press.

By contrast, the marginal cost for fulfillment is close to the total cost. The reason is much of the fulfillment cost is made up of postage, supplies, and insertion charges, and these expenses vary directly with the number of subscribers.

Perhaps the most controversial figure in Table 1 is our marginal cost for overhead expenses. Some publishers might argue that overhead doesn’t go up just because you add more subscribers. Others might insist that each new subscription should have to carry its full share of overhead cost. The truth, we’re persuaded, lies somewhere between these extremes.

The amount we’ve allocated for overhead is based on the proposition that it costs money to spend money — that is, the more you spend on your direct expenses (editorial, marketing, type and printing, and fulfillment), the more you spend on overhead. Moreover, we argue that overhead rises in direct proportion to direct expenses.

Say, for instance, you decide to redesign your publication. You send it out to a designer and he or she ultimately submits a bill. Your direct expense consists of the designer’s bill, but inevitably, you also incur lots of extra overhead expense — staff time spent in meetings, delivery services, phone calls, and so forth. Thus, the more you

spend on direct expense, the greater your overhead expense.

Our table shows \$99,000 in direct expense and \$30,000 in overhead. So overhead comes to roughly 30 percent of our direct expense. Our marginal costs total \$5.90 and our marginal overhead equals \$1.77, or 30 percent of \$5.90.

Calculating Income

What about the income side? You need to know how much money you expect to get from a new order in order to calculate your breakeven point. The amount each additional order will bring in, of course, depends on your payment and renewal rates. Suppose your payment rate on new orders is 85 percent. Your renewal rate is 65 percent for first renewals and 80 percent for subsequent renewals. (By renewal rate we mean your effective paid renewal rate — so, if you accept unpaid renewals you must adjust for the payment rate on these renewals.)

Table 2 shows the present value of the income and expense from 1,000 new subscribers over seven years. We’ve assumed that the price of your publication comes to \$100 per year, and the marginal cost of a single new subscriber is \$7.67.

The second column in Table 2 shows the number of payments you receive each year. In year one, you receive 850 payments (the payment rate of 85 percent times 1,000 orders). In year two, you expect to receive 552 payments (a 65-percent first-renewal rate times the 850 subscribers who paid the first year), and so forth in years three through seven.

In the “Income” column, we show the total amount you receive from the orders in column two. So in year one, you collect \$85,000 — 850 payments times the publication price of \$100. In year two, you collect \$55,200 (552 payments times \$100).

Year	Number of payments	Income	Present Value of Income at 15%	Cost at \$7.67/year	Present Value of Cost at 15%
1	850	\$85,000	\$85,000	\$6,520	\$6,520
2	552	55,200	48,000	4,234	3,682
3	441	44,100	33,346	3,382	2,557
4	352	35,200	23,145	2,700	1,775
5	281	28,100	16,066	2,155	1,232
6	224	22,400	11,137	1,718	854
7	179	17,900	7,739	1,373	594
Total		287,900	224,433	22,086	17,214
Total per subscriber		\$288	\$224	\$22	\$17

Table 2

Present Value of income and expense from 1,000 new subscribers

We must take into account, however, the time value of money — the fact that a promise to pay \$1 a year from now is worth less than \$1 today. The reason? If you had \$1 today, you could invest it, and you'd have more than \$1 a year from now. The fourth column of *Table 2* — “Present Value of Income at 15%” — reflects this fact.

As you can see, we assume you earn 15-percent interest on your money. So if you invested \$1 today, you'd pocket \$1.15 the following year $(1+0.15) \times 1 = \$1.15$). But this concept works both ways. Let's turn the situation around, and say you're promised \$1 the following year. Today, that promise is worth only \$0.87 — \$1.00 divided by $(1+0.15)$ equals .87.

In column four, then, we show the amounts you would have to invest today at 15 percent in order to earn the amounts you see in column three. These “present values” represent the *real* value of your projected subscription income given the time value of money.

In column five we multiply the number of payments by the marginal cost of each order — \$7.67 — to see the

cost of servicing the 1,000 subscribers. And, in the final column, we show the present value of that cost at 15% — that is, what it will cost each year in *today's* dollars to service those subscribers.

So if we project your anticipated income and costs over seven years, the average amount of income you can expect from a new order you receive today is \$288. The present value of that income is \$224. Since your cost is \$17, the value of the order today comes to \$207 (\$224 less \$17).

This means that in theory you should be willing to pay up to \$207 to obtain a single new order. In practice, it makes sense to leave some margin for error. Experience has taught most of us that a lot can go wrong in the quest for new orders. For example, response rates from mailings can fall off unexpectedly, renewal or payment rates can drop, or costs can increase.

To allow for these and other contingencies, we'll count only 75 percent of the theoretical value of an order. So, in our example, you would be willing to spend \$155 for a new order (75 percent of \$207).

Mailing Response Rates

Now that we know the value of an order, we figure out the smallest percentage response rate we can accept from a test mailing in order to go ahead with a follow-up. Or, using our example, is a 0.65 percent response enough to make further mailing worthwhile? We've calculated that each new order is worth \$155. Let's say that the cost of doing a full mailing comes to \$340 per thousand. Obviously, we need $340/155 = 2.19$ orders to pay for mailing 1,000 pieces. This is a response rate of 2.19 orders per thousand, or 0.2 percent. So, the minimum response you can get and still break even is 0.2 percent. In others words, it is well worth your time to follow up the test that yielded 0.65 percent.

The Breakeven Calculator

The breakeven program we've provided makes performing these calculations simple. To install the program just insert the CD into your CD-drive and follow the prompts on the screen. If the installation program does not begin within a minute or so, click on the Start button, select Run, browse to your CD-drive, select setup.exe and click on “OK.”

Next fill in the price of your publication, your marginal costs (calculate these the way we explained on pages 1 and 2), and your payment and renewal rates. The calculator now shows you the response rate you need to break even, and the present value of one new order — that is, the maximum amount you'd be willing to pay for one new subscriber.

In *Figure 1*, we plugged in the numbers from our example into the calculator. As you can see, the value of an order is slightly different from that in

QuickFill — Breakeven Calculator				
	Year 1	Year 2	Year 3	
Price	100.00	100.00		
Marginal Fulfillment Cost	7.67	7.67		
Payment Rate	85%	65%	80%	
Mailing Cost Per Thousand	340.00			
Minimum response rate required to break even:				0.20%
Value of one order:				168.17
Years required to recover mailing cost at breakeven				3.6
Discount Rate	15%	Fraction of Value		75%

Figure 1

Table 2. That’s because the program uses a formula that is equivalent to carrying the calculations out for an infinite number of years. Then it takes 75 percent of the resulting value. By carrying the calculation further out we end up with a greater value for each order.

As you recall, we’d be willing to pay \$155 for each order if we looked out seven years. By contrast, the calculator tells us we’d be willing to pay \$168 for each new order. The calculator also shows that it takes four years to get our money back, if we make a mailing that produces orders at exactly the breakeven rate. After four years, the new subscriptions begin to show a profit (over and above the built in 15 percent return on your marketing expense).

The calculator allows you a lot of flexibility. You can, for example, change the discount rate — the interest rate you use to calculate present values — and the “fraction of value,” the fraction of the total value of an order you want to use in your calculations.

In our example, we set the discount rate to 15 percent. So the calculator built in a return of 15 percent on our money. That’s one reason it takes as

long as four years to break even. You may prefer to ignore the time value of money. If so, just set the ‘Discount rate’ to 0.

The fraction-of-value field can also prove handy. Say you don’t want to base your decision to invest in a promotional mailing on the response rate you need to break even. Instead, you want to know before you mail that you can recover your marketing dollars in a certain number of years — two years, say. You just adjust the fraction-of-value field, until the ‘Years’ field equals two. (Increase the fraction of value, and the number of years it takes to break even rises; decrease it and the number falls.)

You’ll also notice that you must enter two separate prices. The calculator uses the first price for year 1 and the second price for all subsequent years. This feature is useful if you give a special price break to new subscribers but collect the full price later on.

What happens if you collect advertising income from your publication? You’ll probably want to add to the price an amount equal to the average advertising income per subscription. (You’d do so, of course, only if you think your advertising rates will increase with your circulation).

You can also enter two different marginal fulfillment costs. So you can enter a higher cost for year 1 if you offer a premium to new subscribers. (Or you can enter a higher cost for subsequent years, if you offer a premium for renewals.)

You’ll notice, too, that the calculator asks you for payment rates for three years. In the first year, you enter the new-order payment rate; in the second year, your first-time renewal rate; and in the third, your renewal rate for the second and subsequent renewals. We’ve broken down the payment rates this way, because these three rates often differ significantly.

Another useful trick is to set the year 3 payment rate to 0. When you do, the calculator ignores all income and expenses after the first two years. (Since it sees no renewals after year 2, it doesn’t calculate any income or expense for those subsequent years.)

What is QuickFill?

QuickFill is an advanced subscription fulfillment system that runs on personal computers. It is designed to give you power and flexibility without sacrificing ease of use. If you would like more information about QuickFill or would like to see our preview package, call us at (800) 762-7702, email info@cwsoftware.com, or visit our Web site at www.cwsoftware.com.

Now you can see the response rate you need to recover your marketing investment in two years.

Over the years, we’ve found the breakeven calculator quite useful. We hope you’ll find it helpful as well.

P.S. If you’re mathematically inclined and want to see the equations that govern the calculator, give us a call or drop us a note. We’ll be happy to provide them.