

How Much Money do I Need? (Part 2)

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HOW MUCH MONEY DO I NEED? (PART 2)

This is the second of two articles, the first of which I posted last week. Judging from the puny number of click-throughs it received, not many people are interested in how much money it takes to increase their sales.

That is about what I expected because most of the small business owners I've met aren't aware of the effect sales have on working capital until they are writhing in agony in a cash crisis.

If you are among the many who did not read last week's article, it's worth a brief review. The article was about a small business owner who started his business with \$31,000 of cash in July. By the following February his sales had risen to over \$100,000 per month. That sounds like a great success story, which it was with regard to sales, but it was a disaster for his business. Even though his books showed a nice profit, he was completely out of cash and he eventually quit business.

He had allowed 90 day credit terms for his customers and as a result had over \$250,000 in accounts receivable. His problems were compounded by his enthusiastic buying practices which had resulted in \$140,000 of stagnant inventory and about \$150,000 in past due accounts payable. (Does any of this sound familiar?) His customers were howling for their product, much of which hadn't even shipped because his suppliers had him on credit hold. The man was frazzled and at his wit's end.

Had the man forecast his cash needs, he would have known that, under the conditions he created for himself, he would have needed \$344,730 in net working capital to finance the inventory and accounts receivable required to support \$1 million in annual sales. He would have known in advance that his \$31,000 was insufficient (way insufficient!), and he would have known to take action to head off the difficulties he was suffering.

CALCULATING NET CAPITAL REQUIREMENT

Last week's article discussed some of the things he could have done to avoid a crisis. In this week's article we'll see how we came up with his net capital requirement.

As always with financial matters of this sort, if you don't want to do the calculations yourself, have your accountant do them for you - but get the numbers! They will guide your decisions and help you avoid a dismal life of perpetual stress. Weakness in financial functions is one of the [3 Reasons Businesses Fail](#) so make sure you get the numbers, one way or another.

Here is how to find the amount of cash necessary to support sales:

In the last article, we said that there are **three factors** associated with sales that most affect working capital:

1. Increases in accounts receivable,
2. Increases in inventory, and
3. Increases in accounts payable due to our suppliers

Increases in accounts receivable and inventory consume cash. Increases in accounts payable provide cash.

To see how it works, we'll use our small business owner's numbers. He was selling product at the pace of \$1,000,000 per year. His cost of the goods he sold was 60% of sales. We will assume (because it was true) that 100% of his sales were made on account, that his average accounts receivable took 90 days to collect, and that he keeps three month's worth of inventory on hand. His credit terms with suppliers required him to pay all accounts payable in 30 days.

One method for finding net working capital requirements (there are others) looks like this:

ACCOUNTS RECEIVABLE:

The working capital required to fund accounts receivable is equivalent to the percent of sales made on account (100%) times the number of days accounts receivable are outstanding times the average sales per day.

1. Number of days accounts receivable are outstanding = 90 days
2. Average daily sales made in account = $100\% \times \text{annual sales of } \$1,000,000 / 365 \text{ days} = \$2,740 \text{ per day}$

To find the working capital we need to support accounts receivable, multiply the average daily sales times the days receivables are outstanding:

1. Average day outstanding (90) \times average daily sales (\$2,740) = \$246,600

The result tells us that, under the credit terms he allowed, our business owner needed \$246,000 of working capital to fund accounts receivable resulting from \$1,000,000 in annual sales.

INVENTORY:

The working capital required to fund Inventory is equivalent to the average days inventory is held times the average daily **cost** (\$.60) of sales:

1. Days inventory is held = 90 days
2. Average daily **cost** of sales = $\text{daily sales} \times .60 = \$2,740 \times .60 = \$1,644$

To find the working capital we need to fund inventory, multiply the average days inventory is on hand times the average daily cost of sales:

1. Days inventory on hand (90) \times average cost of sales (\$1,644) = \$147,960

The result tells us that his inventory tied up an average of \$147,960 of working capital to support \$1,000,000 in sales.

ACCOUNTS PAYABLE:

The working capital provided by accounts payable (which are loans to us from our suppliers) is equivalent to the number of days they allow us to pay (30) times the average daily cost of sales:

1. Days credit allowed = 30
2. Average daily cost of sales (from above) = \$1,644

To find the working capital provided, multiply the days credit allowed times the average daily cost of sales

1. Days credit allowed (30) X average daily cost of sales (\$1,644) = \$49, 230

The result tells us that accounts payable provide an average of \$49,230 of working capital in support of \$1,000,000 sales.

PUTTING IT ALL TOGETHER

The net working capital required to support \$1 million of sales under the conditions our owner allows are:

\$246,000 to fund receivables plus

\$147,960 to fund inventory minus

(\$49,230) provided by suppliers, equals a

\$344,730 net working capital require to fund \$1,000,000 of sales.

We can make that number more useful by converting it to a percentage of sales:

\$344,730 working capital / \$1 million in sales = 34.5%

The 34.5% is more useful because we can apply it to any amount of sales to find our working capital requirements. For example, if we forecast \$750,000, \$500,000 or \$2 million in sales, our net working capital requirements would be:

\$750,000 sales X .345 = \$258,750 net working capital

\$500,000 sales X .345 = \$172,500 net working capital

\$2 million sales X .345 = \$690,000 net working capital

Percentages are a useful tool over a reasonable range of sales, but we have to use them with caution. It's not hard to imagine that if we double our sales that our expenses, and therefore our working capital requirements might go up as a percentage of sales.

JUST DO IT

AGAIN: if you do not enjoy understanding or doing working capital calculations, don't worry. Get your accountant to do it for you. But do it!

If your accountant gives you a far - off look when you ask about working capital, find a different accountant.

If you have any further questions, please don't hesitate to mail me at Martin@annealbc.com or visit www.annealbc.com



Martin Holland

Martin Holland is the son of a successful entrepreneur. He grew up hearing about margins and markets, R&D and sales, risk and return on investment. He learned to love the language and rigors of business and grew to believe that business is both the most human of all endeavors and the highest calling. After selling a company in 2011, Martin became a coach in order to help other owners build profitable businesses that do not require their day-to-day involvement.

A native of Norman, Martin earned a B.A. degree from Hastings College in Hastings, Nebraska and a Masters in Business Administration degree from the University of Oklahoma. Over the past 7 years he has written business plans that have raised over \$52.4 million in bank and investor financing. He has helped 157 (and counting) business owners reduce stress and increase performance through clarity of purpose, better marriages, more money, and more free time away from the business.