Excess investment in inventory remains a perennial management problem for wall and ceiling contractors. Moreover, that problem has a direct, detrimental influence on the earnings in a business. The business with too much inventory must absorb the extra expenses that arise from carrying that excess—i.e., the costs that come from maintenance, obsolescence, insurance, financing.

While most business owners recognize the problem, many find it difficult to determine the appropriate inventory level for their operations.
“... inventory management involves more than maintaining stock adequate to service customer needs. Indeed, every dollar committed to inventory becomes an investment for the business... (and) excess inventory absorbs cash, dollars that should be free for profitable use elsewhere.”

Certainly, no single criterion fits every business circumstance. However, the perspective that comes from the “average investment period” may provide the key to inventory control in your operation.

The average investment period measures the length of time each dollar you invest in inventory remains in that form before a sale converts it into cash (or accounts receivable). We will introduce the procedures that identify the average investment period in a business. Then we discuss the benefits that can come from that inventory management perspective.

We use the experience of Brooks Demountables, Inc. to illustrate the average investment period calculation. Brooks is essentially in demountables and generates $60,000 per month in sales. The firm’s cost of goods sold averages 70% of sales, or $42,000 per month.

As indicated in the simplified balance sheet below, Brooks Demountables maintains $140,000 in inventory. That inventory level presumably provides the firm with the ability to meet any customer’s needs immediately. At the same time, however, Brooks has to use a $70,000 bank loan to help maintain that investment in inventory.

<table>
<thead>
<tr>
<th>Brooks Demountables, Inc.</th>
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<tbody>
<tr>
<td>Cash</td>
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<tr>
<td>Inventory</td>
</tr>
<tr>
<td>Other Assets</td>
</tr>
<tr>
<td>Total Assets</td>
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<tr>
<td>Accounts Payable</td>
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<tr>
<td>Bank Loan</td>
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<tr>
<td>Total Liabilities</td>
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<tr>
<td>Stockholder’s Equity</td>
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<td>Liabilities and Equity</td>
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The prevailing high cost of borrowed funds encouraged Brooks to take a new look at his inventory management policy. Indeed, he recognized that a lower inventory level would reduce his firm’s need for expensive external financing.

Consequently, Brooks explored the potential for reducing his inventory without affecting customer service capability. That analysis began with the calculation of the firm’s average investment period.

Calculating the average investment period in any business follows a two-step process:

1. Divide the monthly cost of goods sold total by 30 to obtain the firm’s average daily cost of goods sold.
2. Divide the average daily cost of goods sold into the firm’s present investment in inventory to find the average investment period.

Thus, Brook’s calculation becomes:

\[
\text{(1) Average Daily Cost of Goods Sold} = \frac{\text{Monthly Cost of Goods Sold}}{30}
\]

\[
\text{Average Daily Cost of Goods Sold} = \frac{\$42,000}{30} = \$1,400
\]

\[
\text{(2) Average Investment Period} = \frac{\text{Inventory Investment}}{\text{Average Daily Cost of Goods Sold}}
\]

\[
\text{Average Investment Period} = \frac{\$140,000}{\$1,400} = 100 \text{ Days}
\]

Thus, each dollar Brooks Demountables invests in inventory remains in that form for 100 days. That fact—coupled with research into supplier shipping habits—led to a reduction in inventory that ultimately increased Brooks’ earnings.

Indeed, Brooks found that his firm seldom had to wait more than thirty days for delivery of any purchase order. In fact, his suppliers shipped significant orders immediately upon receipt.

After putting these facts together, Brooks concluded correctly that it made little sense to maintain inventory on hand sufficient for 100 days’ sales, when suppliers delivered any item in that stock within thirty days or less.

Based on the above analysis, Brooks elected to cut the firm’s average investment period in half—i.e., from 100 to 50 days. That decision naturally reduced the investment in inventory from $140,000 to $70,000.

Significantly, the lower inventory level did not affect Brooks’ customer service capability. Indeed, the twenty days beyond the average thirty day re-stocking period still left a comfortable cushion to absorb any extraordinary customer demand, or unavoidable delay in shipments from suppliers.

Moreover, the $70,000 reduction in inventory eliminated Brooks’ need for external financing. Eliminating that debt—and the associated interest expense—naturally led to an increase in the firm’s earnings. Thus, properly interrelating Brooks’ average investment period with supplier shipping habits directly benefitted the firm’s bottom line.

Of course, the average investment period is merely another term for the traditional management tool, “days sales in inventory.”

However, viewing each dollar in inventory as an investment emphasizes an important perspective for management.

Thus, inventory management involves more than maintaining stock adequate to service customer needs. Indeed, every dollar committed to inventory becomes an investment for the business. Any excess inventory absorbs...
cash, dollars that should be free for profitable use elsewhere.

Significantly, any overinvestment in inventory hurts your earnings, even if you don’t need to borrow to carry that asset. Of course, you won’t see the damage in your income statement.

Instead, you suffer an opportunity cost. Your profits are less than they should be. Dollars that sit idle in excess inventory contribute nothing to a business. In any circumstance, those dollars can be profitably employed elsewhere. That holds true if they do nothing more than earn interest in a savings account.

The chart below adds a visual perspective to this argument. It illustrates the actual cash benefits a business realizes from a lower average investment period.

For example, referring to the chart, the business with a $1,000 average daily cost of goods sold frees that much cash each time it shrinks its average investment period by one day. A five-day reduction liberates $5,000 in cash.

You can easily adapt the ideas discussed here to your own business circumstance. Thus, you identify the average investment period for each dollar devoted to inventory. Then, you measure the cash benefits you can derive from any reduction in that inventory.

Of course, you don’t want to reduce inventory to a level that might reduce your service capability or damage sales. At the same time, any dollar held in excess inventory is a poor investment for any business. Eliminating that excess leads directly to higher profits.