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Problem Solving for Student Businesses

For Consultants Costs of Goods Sold (COGS) and Gross Margin

What is Cost of Goods Sold (COGS)?

COGS is a measure of efficiency within a business. Basically, COGS is ALL direct expenses that go into the production of the product. The lower the costs of goods sold, the better.

In a food business, COGS would include the costs of bread, meat, cheese and other ingredients. By contrast, operating expenses include expenses such as full-costing, telephones or other expenses or "overhead" that don't vary according to the level of sales.

Why use COGS?

Since many businesses purchase materials and supplies prior to actually using them, the COGS calculation helps to attribute the expense of the materials used with the revenues earned on the sale of those items. COGS can also be used to calculate gross margins and net income.

Why is COGS important, and how do I calculate it?

Let's pretend that you volunteer to run a paper clip shop. You estimate that the shop will sell 1,000 paper clips each month this year at \$.02 each. Your first month on the job you order 12,000 (1,000 x 12 months) paperclips at \$.01 each and sell 1,000 of them at \$.02 each. Overhead for the month costs \$5. No labor costs, since you're volunteering. Simply using cash accounting, the company's income statement would look like this:

Revenues	\$20	
-Materials	\$120	
<u>-OH</u>	<u>\$5</u>	
=Net Income		<\$105>



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Under this method the store looks doomed. In actuality, you've sold exactly what you predicted for the month and the remaining 11,000 paperclips are still available for sale in future months. By using the COGS calculation we see:

Beginning Inv	\$0
+ Purchases	\$120
= Goods AFS	\$120
- Ending Inv	\$110
= COGS	\$10 or 50% of revenues

By computing the net income using COGS, we see:

Revenues	\$20
-COGS	\$10
Gross Margin	\$10 or 50% of revenues
-OH	\$5
= Net Income	\$5

What is the benchmark for COGS?

The industry target for COGS for retail businesses is around 50%. If the business used a 100% mark-up, like in our example (and typical in the retail industry), then a 50% COGS would mean that the business experienced no theft or loss. The industry standard for food businesses is around 40%.

Keeping a watchful eye on your business's COGS will help you know how efficient the business is overtime and how efficient it is compared to the industry.

What is Gross Margin?

Gross Margin is an often overlooked metric. It is the amount of revenues that can be used to cover overhead/fixed-expenses and profit. Businesses want a high gross margin, which can only be achieved by maintaining a low cost of goods sold.