

# Build a bottom-up financial model to show potential investors you're serious

Anthony MillinContributor 4:30 AM PDT • April 10, 2023



Preparing to raise a round of funding is one of the most important tasks every founder goes through. Compiling a deck, teaser, and executive summary requires a thorough understanding of a startup's story and the market in which it operates. But for many founders, the most challenging item required is often the most crucial: building a financial model.

[Anthony Millin](#) is a startup attorney, serial entrepreneur, venture partner, and the founder and co-chair of NEXT powered by Shulman Rogers.

A sound financial model not only helps founders understand their own business and how much capital to raise, but is usually required by an investor, who will comb through the model during due diligence.

Your model is your financial roadmap. As a founder, it's your responsibility to never lose sight of your "runway" – how long before you run out of cash – which is calculated by dividing your cash-on-hand by your monthly burn rate. Your model should reflect a runway that is long enough to get you to your next round of financing or break-even cash flow under a more conservative set of revenue assumptions. What do the next twelve to eighteen months look like from a cash flow perspective? For example, does the business have enough runway, even if you only achieve half of your expected revenue – or no revenue?

Here's your model's end goal: to cohesively demonstrate to a potential investor how your business will grow from both a revenue and expenses perspective and to indicate how much money you should raise. While it may feel unfamiliar, as a founder there are a few key things to keep in mind that will ensure that your financial model is both a powerful tool for you and is also investor ready.

*As a founder, it's your responsibility to never lose sight of your "runway" – how long before you run out of cash – which is calculated by dividing your cash-on-hand by your monthly burn rate.*

## **Build a model that covers the next five years**

No one can predict the future, but you need to tell an investable story that demonstrates your company's potential to grow. It usually takes five years to

show how a business scales, and if you are not realistic in presenting how your business will do that, the model may be discounted by an investor. Most investors will want to see a three-year projection at a minimum – but five years provides for a more reasonable ramp up in revenue and profitability.

A financial model will often include a few different statements: income statement (profit and loss statement), cash flow statement, and a balance sheet. For early-stage companies, with limited assets and liabilities, a balance sheet will often not be as relevant as it would be for a later-stage company. The focus is, therefore, on the income statement, and some version of a cash flow statement. Your income statement may be broken down into revenue, cost of goods sold, gross profit, fixed costs, and EBITDA (earnings before interest, taxes, depreciation, and amortization). EBITDA can serve as a proxy for cash flow, or you can prepare a more formal cash flow statement.

## Design a “bottom up” financial model

There are two ways to build a financial model: *top down* and *bottom up*. In a *top-down* approach, you estimate the size of the market and calculate your percentage of that total market revenue each year. A *bottom-up* model is more powerful, detailed, and comprehensive. In this model, you start with granular assumptions that drive revenue and build on each other.

A bottom-up model for revenue, cost of goods sold and gross profit, fixed expenses and EBITDA should be calculated on a monthly basis for 60 months. The monthly model should roll up into a five-year annual summary, which is what will initially be presented to an investor. During due diligence, many investors will then dig into the more detailed monthly model and review all of its assumptions.

Here's an example of revenue assumptions in a bottom-up model: Take the projected number of leads generated in a month and multiply it by the conversion rate from a lead to a unit sold and revenue per unit sold. So if you have 100 leads in March 2023, and multiply those leads by a 20% conversion rate and again by \$1,000 per unit sold, you get \$20,000 in revenue for March.

Remember, the goal here is to demonstrate a thorough understanding of your market *and* how your business scales, which is then reflected through the various assumptions you use to build the model. Investors appreciate that it is very challenging to project total revenue each year – but they will spend time understanding your assumptions, so best be prepared.

The bottom-up approach is almost always the better choice to accomplish this. As you get real market data, over time you can continue to refine your model effectively by updating your assumptions with this data, thereby adjusting the entire model accordingly. As you collect more data from the marketplace, the model improves in accuracy and reliability.

## **Make sure the fixed expenses for the first 12-18 months of your model are precise**

The first 12-18 months of forecasted fixed expenses (research and development, marketing and sales, and general and administrative expenses) must be as precise and detailed as possible. You should know exactly how many people you will hire and how much each will cost in salary, employee benefits and employment taxes (fully loaded cost), as well as how much you plan to spend on marketing and sales, research and development and general and administrative costs, such as rent, legal, accounting and insurance.

This detail allows both you and the investors to more accurately assess your burn rate for the next 12-18 months, which is critical to cash flow management

## Run a sensitivity analysis

A sensitivity analysis evaluates possible variations for each assumption and the level of impact that each variation is expected to have on revenue and cash flow. In addition to your projected scenario (sometimes called your "base case"), you should model scenarios for when things go much better than your base case, and for when things do not go as well as your base case. Analyzing how these scenarios will impact revenue and cash flow will be invaluable. For your "down" model, you should run the model at 50% and 25% of the projected revenue in your base case or even zero out your revenue, in order to appropriately determine just how much capital needs to be raised. This financial exercise is for your benefit, as well as your investors'.

## Understand the exact moment that you run out of money

Perhaps the most important step is to predict when your runway will expire. Using a conservative version of your financial model helps ensure that if the worst case comes to fruition, you won't run out of money before anticipated.

For example, if your projected fixed expenses (burn rate) are \$100,000 per month, you raised \$1 million to get started, and your base case shows a monthly gross profit (revenue less cost of goods sold) of \$20,000, you will run out of cash after 12 months. If you need 18 months to reach the next critical set of milestones and close on the next round of funding, then you know that raising \$1 million is not enough, and you will need to raise \$1.5 million at a minimum. However, that provides no buffer if you do not achieve

your projected revenue. A sensitivity analysis holding revenue at zero would indicate a raise of \$1.8 million to remove the pressure of hitting revenue targets, which is hard to do upfront.

Generally speaking, an early-stage investor will want to understand your team, the market opportunity (e.g., is this a \$100 million or a \$1 billion dollar market opportunity), how the business scales and what drives the business model. A detailed bottom-up five year financial model will be an important component of your fundraising process, both for you as the founder and for the investors looking at investing in your startup company.