

Implementing a Modern Data Stack as a Start-Up

The modern data stack provides immediate benefits, but as a start-up, you've got concerns about the amount of money and personnel resources you'd need to allocate to the project. Let's take a look at your options and what they'll require of you and your team.



Buying your data stack components

Purchase all the tools you need individually. This doesn't always require engineering support (although companies often rely on their engineers for this), but it does require someone owning the project. That person needs the technical knowledge to understand the "why?" behind each step, including the choice of one tool over another.



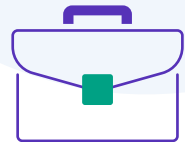
Buying an out-of-the-box data stack

Get everything you need packaged together in an out-of-the-box modern data stack. These options can be set up in hours — not weeks or months — and require little to no internal engineering resources.



Building your own data stack

Use your existing engineering team (or hire one) to build the components you need, including tools to extract and load data into a data warehouse, as well as transform the data for analysis.



Outsourcing to a contractor or agency

Hire an agency to either build you a data stack or assemble it for you. But, the goals of an agency and your team aren't automatically aligned. They're tasked with setting up your pipelines, but not necessarily in the best way for you, which can result in shortcuts or tech debt. If you're dissatisfied with performance down the road, you'll be looking for a new agency or reverting to a previous option.

Considerations for start-ups

Buying Data Stack Components

Out-of-the-Box Modern Data Stack

Building a Stack or Hiring an Agency



Cost

Cheaper than building or an agency.

Approximately 30% cheaper than piecing together a data stack yourself.

Good data engineers aren't cheap.



Personnel Resources

Someone needs to identify options and select tools. Personnel resources are also required for maintenance, even if your service providers are fixing major issues.

Someone at your company needs to own the account, but there isn't a lengthy project to oversee. There's also little to no maintenance work.

You'll take someone away from their core job function in order to build or monitor the assembly of the data stack.



Time

Set up is much quicker than building or using an agency, but you'll need to spend time integrating all the tools.

Set up in an hour and pursue critical projects immediately.

You're trying to maintain or increase momentum — you don't need a solution that takes weeks or months to implement.



Managing your data stack

No matter the option, someone is managing the data stack and fixing things when they break — this project doesn't end when you acquire tooling. If you're using contractors or an agency, you'll need someone on your team with the technical knowledge to manage that project. If you're building a data stack yourself, someone will also have to maintain it afterwards. If you buy a data stack, vendors will take care of maintenance. Although if you've assembled tools yourself, you may run into more work with integrations.

