
CHAPTER

7

**Choose the Solution That's
Right for Your Organization**

**Deciding Whether to Build,
Buy, or Hire**

We've explored some case studies that illuminate A/B testing's guiding principles and high-level concepts. Now it's time to get started, and that means it's time to get *practical*.

The first step is making a high-level decision about how you'll bring testing onboard: you can *build* your own testing tool in-house, *buy* a testing platform, or *hire* a consultant or agency to do the testing for you. There's no wrong choice, and each has its pros and cons. Indeed, many organizations elect to combine more than one of these approaches. We walk you through the things to consider when making the decision about what's best for your needs.

Option One: Build

Building a testing solution in-house is a viable option for organizations that have significant engineering resources available. We've found that most companies don't decide to suddenly build a testing tool from scratch without an engineering team that's closely tied to the process. A homegrown testing tool is usually something that organizations add on to an already established data-gathering and analytics machine.

Building an in-house solution requires substantial engineering effort, so it's rare for small companies with limited engineering resources to pursue this path. Typically only larger teams with specialized needs and enough dedicated engineering resources to pull it off will build a solution for themselves. For example,

Amazon has invested considerable effort over many years to build an extensive testing platform that is integrated closely with their website, product catalogue, and customer database.

There are many reasons why a company might choose to invest in a homegrown testing tool, but the biggest is probably the desire to run experiments that require a deep connection with proprietary internal systems, like Amazon's customer database in the example above. Custom-built testing platforms can provide specialized experiment targeting capabilities, tight integration with your build/deploy systems, and the ability to experiment with complex, server-side logic, like a search ranking algorithm.

Sometimes the decision to build an A/B testing capability to the website arises out of iterative additions to an in-house analytics platform. This was the case for Etsy, an e-commerce site that sells handmade and vintage goods. Today, their team runs every change or new feature release through an A/B test, but they didn't always work that way.

Dan McKinley started at Etsy in 2007, and discusses how they didn't do any measuring or A/B testing in the early days. "Nor did I really have any conception that we *should* have been doing it," he confesses. By 2011, McKinley had noticed a pattern in the way they developed products. As he describes it, the engineers would spend a great deal of time and effort working on a new feature up front. They would release that feature, and then talk about it at a company-wide meeting where there would be a lot of applause for the new feature. Then they would move on. Two years later, they would eliminate the feature they had spent all their time and effort developing—because it turned out that nobody was using it.

"I realized that we were failing in what we were trying to do; we just weren't very good at realizing that we were failing,"

McKinley told us. “[We wanted] to be better at realizing we were failing, and if at all possible, not fail. And that was the motivating factor in my getting into experimentation on the web.”

Etsy has had access to a lot of data, data engineer Steve Mardenfeld explains, pretty much since the site launched. In turn, they have tools to collect, examine, and analyze that data in an effort to improve the user experience on the site. For example, examining the data lets them improve their search algorithms and recommendations. Whenever the engineers created a new feature, they would release it to a small percentage of users and look for any operational concerns. Once they knew it was functioning well (i.e., it wouldn't break the site) they would release it to 100 percent of Etsy users.

“So we were already doing the basic idea of A/B testing; we just weren't actually measuring anything,” Mardenfeld says. “It just seemed like a really good fit to try to shoehorn this into the process that we already had.”

Etsy's team of 100+ engineers decided to go with an in-house testing tool because they already had the infrastructure in place to support A/B testing. All they had to do differently was start tracking how the new experience performed against the original experience.

The A/A Test

When building your own A/B testing tool from scratch, one of the obvious areas of concern will be simply making sure that the tool is functioning accurately. One of the handiest ways to verify the accuracy of a testing tool is an *A/A test*. An A/A test, as the name implies, involves testing two *identical* versions of your page to ensure there are no statistically significant differences reported

between them. If there are, then something fishy or erroneous may be happening with the way the test is being run or the way the data is collected or analyzed. An A/A test is a good way to assure yourself (and your boss) that your testing platform is functioning correctly.

Option Two: Buy

Let's talk about what you get when you buy a testing platform. Most follow the *Software-as-a-Service (SaaS)* model; in other words, you won't download anything or purchase a physical product. Rather, integration happens as easily as a one-time copy-and-paste onto your site, after which you access the software through the web and your tests and data live in the cloud. Buying a testing platform makes sense for a range of group sizes—individuals, small companies, and large companies. At Optimizely we work with companies ranging from self-service startups to Fortune 100s that are equipped with large testing teams. SaaS solutions offer a number of advantages:

- *Built-in features:* An obvious advantage of buying a testing solution is that advanced testing features are included in your purchase. (You can, for example, target visitors from Facebook who see one variation, and compare them to Pinterest visitors who see a different one; there is more on targeting in Chapter 13.) Commercial testing software is typically purchased as a subscription and many platforms offer multiple subscription tiers, with additional built-in features available in higher tiers.
- *Automatic updates:* When building a homegrown testing platform, the ability to have total control over the platform

requires an ongoing engineering commitment: everything the company wants the testing suite to incorporate requires engineers to build, test, and maintain it over time. A company using an off-the-shelf SaaS product will effectively remain at the cutting edge without additional effort.

- *WYSIWYG editing:* Leading A/B testing SaaS platforms enable marketers, advertisers, designers, and other non-technical users to easily create and test page variations, using a visual what-you-see-is-what-you-get (WYSIWYG) editor that doesn't require writing any custom code.
- *Trustworthy reporting:* Accurate and reliable statistical reporting and calibration are essential for any data-driven organization. When you purchase an off-the-shelf testing solution, you're buying something teams have spent time building, optimizing, and debugging. You can therefore trust them to give you accurate results about how your tests performed. What's more, these platforms are constantly being tested by the thousands of clients using them. (If you want to test the tool's accuracy yourself, you can of course run an "A/A test" as discussed above.)
- *Professional Support:* Most A/B testing platforms offer some form of dedicated technical support, and some even offer additional consulting services (for an additional charge). Technical support is especially important for teams in which non-technical users are driving the testing process.
- *Community:* When you sign up for an A/B testing platform, you are joining an existing community of users who are available to answer questions, give technical support, and suggest best practices.

Questions to Consider When Evaluating an A/B Testing SaaS Solution

1. Does the platform *integrate with other tools* you already use?

For most businesses, an A/B testing tool will complement the other tools you're already using, especially analytics. The more your efficiency, data collection, and lead-generation/nurture tools communicate with each other, the more effectively you can use them in concert. Plus, integrating all of these can maximize the ROI you get out of each service alone.

2. Does it *meet your budget*?

Testing solutions charge in a variety of different ways and while we encourage the reader to explore her options, ultimately the decision should come down to ROI: will the gains achieved by regular testing outweigh the usage fees paid for the platform? If budget is a concern, it may be possible to start small and expand: for example, for companies with multiple web properties or an international presence it might make sense to start with a single property/region and expand as you begin to realize gains.

3. How well do you gel with the *platform provider's team and support approach*?

Because many tools can provide similar features technologically, the brand's personality, dedication to customer success, and availability are other critical elements to consider. Support on the platform must come from the platform provider, so ensuring the help is there if you need it is important. It may indeed be the variable that helps make your decision, since what differentiates one testing tool from the next is, in large part, the people. Are you looking for a team of people that can come up with great testing ideas for

you? If you're new to A/B testing, you might need a company that has dedicated support resources available 24/7 should you have questions.

Option Three: Hire

The final option is to hire an agency or an optimization consultant to do testing for you. An agency is a service independent from the client that provides an outside point of view on how best to sell the client's products or services—or in this case, optimize the client's website. Most digital marketing agencies are quickly adding A/B testing to the list of services they offer; they're also partnering with testing platforms in order to use them on clients' websites. Companies can hire agencies or consultants as short- or long-term solutions for testing.

There are myriad reasons to outsource testing. For instance, a company that doesn't have the internal resources to allocate to testing will instead choose to hire another entity to take care of all strategy and testing implementation. In another scenario, a company might have the bandwidth for ideating tests but lack the technical know-how to execute them. In this case, they'd work with an agency to implement tests. The reverse is also common, that is, for a company to purchase a testing platform and work with a strategic consultant to come up with test ideas.

If you outsource any part of testing—either the creative or the actual execution—then there are a few things to look for before you sign a contract. You want to make sure that the third party has a good track record with optimization strategy and implementation. They should be experts in each testing platform they offer, and provide technical support should you need it. With

many agencies you'll pay the agency per-hour or per-experiment, and some also offer "unlimited" or "constant" testing programs: for a fixed price they conduct an unlimited number of tests within an overall program. Compare plans and think about what will work best for your needs before signing on.

It comes down to a tradeoff between investing time and training in building a team internally, or investing money in an agency. If you're not ready to build an internal testing team who will use a homegrown platform or an SaaS, then your best option is to hire an outside service to handle your testing.

The Choice Is Yours (and Your Team's)

In essence, the choice between buying, building, or hiring a testing solution depends on what makes the most sense based on a variety of factors that only you and your team can assess.

As co-founders of an optimization SaaS, it's hard for us to stay *entirely* objective, but the truth is that everyone's needs will be different. It's up to you to consider your own situation and then decide which solution will work best.

The decision need not occur in a silo; in fact it behooves you to *anticipate pushback* from your team and invite them to be part of the decision-making process. In order for A/B testing to become a viable solution for your company, everyone needs to trust the data that comes out of a test. If a couple of people don't trust what the A/B testing platform proves to be true, the entire discussion will center around questioning the validity of the data rather than what the data means. If you have a usability or IT team, make sure you have their blessing before making a decision. Start cementing buy-in up the chain of command from the moment you start considering which solution works best for your organization. If

everyone feels good about the tool you're using, then *actually testing* will be much easier.

Remember that people might see A/B testing as another step in an already long process, not to mention that it could be a completely new (and hopefully exciting) framework for how decisions are made. Nothing will scare people away faster than mandating they run every change to the website through an A/B test before rolling it out. No matter how shocking the data is or how sleek the testing tool looks, it won't work if the team is ambivalent toward it. Nothing can replace a person who is genuinely interested and curious about A/B testing. Unite the team around the fact that A/B testing is the most powerful way to turn clicks into customers *before* you select a path to get there.

The good news is that “all roads lead to Rome.” No matter which route you choose, you'll be taking your first step on the road to a better website and a better user experience.

The next step, of course, is running your first test. And that's where we pick up in Chapter 8.

TL;DR

- Building your own testing platform requires a significant and ongoing engineering investment, but can ultimately provide the greatest level of control and the **tightest integration** with your team and deployment cycles.
- An **A/A test** is a helpful way to ensure that your solution is functioning, reporting, and analyzing correctly.
- Many A/B testing Software-as-a-Service (SaaS) platforms are easy to use **without requiring engineering support**: marketers and product people without a coding background can create and run variations in a visual WYSIWYG environment.
- An agency can help your team with the **ideation** of tests, **execution** of tests, or both.
- When picking the solution that best fits your company, consider making **key stakeholders** part of the exploration process. The earlier you bring others on board, the easier it will be to get buy-in.