

Why does A/B testing help advertisers advertise more efficiently?

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Before launching an ad campaign, it is common sense to test the campaign's tactics on a segment of one's audience. Using an existing ad or an alternate version provides a basis for comparison needed for an A/B test. One or more A/B tests can be used to craft an ad from the successful elements of each test, then another test conducted on that possibly-final ad before activating it. However, a successful A/B testing program is more than just a matter of seeing which ad had the higher metrics of the two. Defining what success or failure would be for an ad --- in testing and in production --- is problematic, but worthwhile as we will see. In any event, there are non-financial benefits from A/B testing. We will start our consideration of A/B testing by looking at those non-financial benefits.

Non-financial benefits of A/B testing

Without the scientific testing and hard numbers that A/B testing can provide, decisions on social media advertising would be by HiPPO: the highest-paid person's opinion.¹ The advantages of A/B testing over HiPPO are:

- Fewer and shorter meetings since the decision is made by the experiment.
- Egos, hypotheticals, tradition, and ideology are replaced with actual consumers and their resulting statistics.
- Thinking outside the box and risk-taking are encouraged because a small test can assess a new idea without anything substantial being at stake.²

Possible pitfalls in A/B testing

These benefits of A/B testing can be negated, however, if an advertiser obsesses over testing every aspect of an ad separately. Paralysis by analysis can result. Those "companies that have had the greatest success with A/B testing favor a nimbler, more iterative approach that tests a handful of different variants of a single variable at a time and incorporates the winner as they go on to the next test."³

There are other possible pitfalls that we will now consider:

- Focusing on quantity, not quality, of leads.
- Not defining success or failure before the A/B test.
- Not considering the price of success in defining success.
- Not testing something because "we'd never do that, so why bother."

PITFALL: Focusing on quantity, not quality, of leads.

In their book [A/B Testing: The Most Powerful Way to Turn Clicks Into Customers](#), Dan Siroker and Pete Koomen describe how one company's A/B testing found that reducing the number of fields on a sign-up form significantly increased completed sign-ups (leads). Implementing the change as policy produced the increase in leads expected. However, the sales team found no increase in the *quality* of all those additional leads. They were a waste of the salespeople's time as well as a waste of ad spend. Despite what Facebook's "Responsiveness" metric suggests, more engagement is not necessarily more business. As Siroker and Koomen point out, we want quality leads, not just quantity. Therefore, in planning an A/B test, we must decide what success or failure will be in terms of the business. Merely having a higher quantity for a metric in an A/B test may not be enough to merit implementation.⁴

PITFALL: Not defining success or failure before the A/B test.

Deciding which metrics will determine success or failure is therefore only part of defining success or failure. The other key part is defining the numeric threshold for that decision. Is it 5% more clicks? 2% more conversions? Whatever the metrics and thresholds decided upon, it is critical they be decided upon *before* the experiment. Otherwise, people may consciously or unconsciously make the results fit their preferred option. Avoiding this bias is the purpose of [hypothesis testing methodology](#). In that methodology, the margin of failure (the alpha) must be defined in advance.

PITFALL: Not considering the price of success in defining success.

What constitutes success or failure in an A/B test should not necessarily be "the higher metric wins." Siroker and Koomen tell the story of urban bike gear retailer Chrome doing an A/B test of video versus static photos in driving sales. A three-month test showed that videos produced slightly more sales, but not enough to justify the significantly greater cost of producing videos. Chrome realized the margin of success had to be high enough to offset the cost of creating videos.⁵

A poor return on investment for an ad is not the only possible downside. The price of success might be alienating certain customers by the message used. It might be the opportunity cost of using the winning approach now rather than on something else where it would have a greater payoff. When defining success and failure before an A/B test, it is therefore important to research the various impacts of what is being tested, then factor that into the definition of success (or failure).

PITFALL: Not testing something because "we'd never do that, so why bother."

Earlier I listed the benefits of A/B testing as including the removal of tradition and ideology from questions of how to advertise. However, those obstacles can reappear in the argument "We would never want to do that, so why test it?" For example, why test a deviation from the company's style guide? Why test using an informal or formal tone that is opposite of our

established practice? Why pitch our product to an unlikely audience? Siroker and Koomen suggest A/B testing should sometimes be considered simply for learning and understanding. At best, the results of such an A/B test could reveal a surprising opportunity.⁶ At worst, the results would simply validate the style guide and other conventions. In that worst case, traditions and ideology would become proven principles, avoiding future argument about them. This alone is a non-financial benefit advertisers can enjoy from A/B testing.

CONCLUSION

A/B testing helps advertisers be more efficient by enabling decisions by hard numbers rather than by argument and the boss' opinion. It also has the benefit of “failing fast” with little money spent to discover which approaches have the greatest chance of success. However, the full benefits of A/B testing, financial and non-financial, can only be realized by avoiding the pitfalls described in this essay.

End notes:

1. Dan Siroker and Pete Koomen, *A/B Testing: The Most Powerful Way to Turn Clicks Into Customers* (Hoboken, NJ: John Wiley & Sons, 2013), Ch. 8 ("The Cure for the HiPPO Syndrome"). Obtained via digital copy on OReilly.com.
2. Siroker and Koomen, Ch. 8 ("The Cure for the HiPPO Syndrome").
3. Siroker and Koomen, Ch. 8 ("The Cure for the HiPPO Syndrome").
4. Siroker and Koomen, Ch. 11 ("How A/B Tests Can Go Awry").
5. Siroker and Koomen, Ch. 6 ("Fail Fast and Learn").
6. Siroker and Koomen, Ch. 11 ("How A/B Tests Can Go Awry").

Source

Dan Siroker and Pete Koomen, ***A/B Testing: The Most Powerful Way to Turn Clicks Into Customers*** (Hoboken, NJ: John Wiley & Sons, 2013), Ch. 8 (via digital copy on OReilly.com).