AB SPLIT TESTING GUIDE
HOW TO BEST TEST FOR CONVERSION SUCCESS
CONVERSION OPTIMIZATION WHITE PAPER
STEELHOUSE
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A retailer’s main goal should be to increase the three factors of a sale - website traffic, average order values (AOV), and conversion rates. These three factors are key business metrics used to determine the success of a website, campaign, advertisement, or other marketing initiative. Each and every marketing initiative can intentionally and/or inadvertently affect conversion rates.

Conversions result from sales, offers, clicks, purchases, downloads, applications, memberships, or any other measurable action. On average, conversion rates range from 1% to 3%. That means as much as 99% of a site’s visitors aren’t answering the call to action that is being measured.

So why are conversion rates so low? Our experience suggests it’s because improving conversion is a complex challenge.

Coming from the perspective of a business that works with clients to improve their website conversions, the best conversion optimization practices are not just about running a large number of tests and reporting on the results. Rather, it involves using data to gain valuable insight and only then running the tests that really count. This is why it’s essential to test thoroughly and target accordingly. By using the correct testing and targeting methods, a retailer can see an increase in conversion rates of 300% or more.

In this white paper, we will examine exactly what A/B Testing is, explain how this successful testing method works, and share information about how to plan and deploy effective campaign tests. In addition, we will also provide readers with valuable testing tips and use cases to help drive conversions.
Importance of Conversion

Many organizations focus on how much traffic they can drive to their website when the real focus should be on how to successfully convert more website visitors. Why are conversions so important?

Because it doesn’t matter how many people visit your site if they don’t make a purchase. It also doesn’t do any good if a visitor to your site does end up purchasing something, but the average order value is so low that it's not profitable. Average order values (AOV) and revenue per visitor (RPV) are what truly impact a retailer’s overall revenue.

Forrester Research estimates that for every $100 spent on driving traffic to websites, companies spend only $1 converting that traffic into business. With that being said, an extra dollar intelligently spent on conversion optimization is clearly a smart investment, as conversions often are what result in profits.

This is why improving conversion rates and average order values are just as, if not more, important as driving the initial traffic to a website.

Factors Increasing Conversions

There are a number of factors that can drive traffic to a website, and as a result, help increase conversion rates. Some of these factors include segmentation, retargeting, display ads, and live offers. Any one of these elements can have a significant impact on the performance of a specific marketing campaign and, with effective testing, can help succeed in increasing site performance, usability and most importantly, conversions.

This is where effective A/B Split Testing comes into play. A/B Split Testing provides online marketers with the ability to segment, target, and then test conversion optimization campaigns to determine what content, advertisement, or incentive consumers want, therefore enabling retailers to increase their online sales and conversions.
What is A/B Split Testing?

A/B Testing, also known as Split Testing, is a powerful testing method in any marketer’s toolbox. In an A/B test, you compare two versions of a page element for a length of time to see which one performs better. Users will see one version or the other, and you’ll measure conversions from each set of users. A/B tests help marketers compare content such as different headlines, call to action buttons, or length of body copy.

The idea, of course, is to figure out which campaign drives better results. To determine which version is superior, you must test both versions simultaneously. In the end, you measure which version was more successful based on a preset list of metrics, such as AOV, click rate, conversion rate, etc., and then select that version for onsite use following the test.

A/B Testing to Drive Conversion

A/B Testing has long been used in advertising and marketing to determine what elements of a campaign, retailer’s website, or landing page receive a better response. And last year, A/B testing was the highest ranked method planned for improving conversion (48%), according to eConsultancy’s 2011 Conversion Rate Optimization Report.

While every optimization opportunity is different, it’s important to know the types of tests that are available and how they can be used to help deliver the incentives and messages that will drive conversions and improve your Return On Investment (ROI).

Conversion Impacts ROI

When planning and executing an A/B test, you have to keep in mind that conversion rates deeply impact your ROI. For example, if you increase a conversion rate by 100%, your traffic initiative just doubled its ROI.

The most important step in measuring marketing ROI is to demonstrate that you can act on insights to improve it. With thorough testing, retailers are given insight into the campaigns that prove successful and those that do not. From here, retailers can determine which initiatives are ROI-worthy and which are not.
Insight Gained from A/B Testing

With A/B Testing, marketers are able to gain insight into their visitors’ onsite behavior and then act on that information in order to increase conversion rates. This testing method permits you to make adjustments to your website, banners, campaign offers, and more, and then track the results.

In A/B Testing, you vary only one element on the page at a time. This element may be any part of the advertising, banner, or special offer that is critical to conversions (e.g. button color, size, ad copy headline). This type of test contrasts from Multivariate Testing, in which multiple and different elements are tested at the same time. An advertiser may also test more than one variation of the same element at the same time. This is known as an A/B/C/etc. test.

For a retargeting campaign, A/B Testing might involve changing the background color of a display ad to a lighter shade, or testing the unique value proposition stated in the messaging. In an email campaign, it may be altering the size of a “call-to-action” button. In an online offer, it could be a variation of the wording on the actual offer. These are all examples of A/B testing.
Benefits of A/B Split Testing

When testing segmentation, retargeting, offer-based campaigns, or display ad campaigns, A/B Testing has proven very useful, especially when the retailer is accessing LIVE behavioral shopper data to determine the best messaging to deliver to their customers and site visitors. For analyzing real time, instantaneous data, you’ll want a real time, instantaneous testing method, and A/B Testing gives you just that. Tests can be implemented and analyzed quickly, so that results can be used to increase more conversions, attain higher AOVs, and drive other important metrics.

01 QUICK AND SIMPLE TO SET UP
You can think of a new display or campaign ad headline over lunch, implement the test, and see results within a few hours or days (depending on the rules you set for your testing strategy). Also, this type of test can be done in most cases without support from your IT department or other outside resources.

02 EASE OF TEST DESIGN
Unlike more complicated multivariate tests, split tests do not have to be carefully designed or balanced. You simply decide how many versions you want to test, and then split the available traffic evenly among them. No follow-up tests are required to verify the results – the best performer in the test is declared the winner once enough data is collected, although, a testing roadmap should be created. For more on Testing Roadmaps, see page 10.

03 GREAT FOR COMPARATIVE TESTING
A/B Testing offers clear, unambiguous results. If you are testing only a single ad or offer variable with two possibilities, the results are available quickly and the best course of action is clear.

04 ANALYSIS IS RELATIVELY SIMPLE
A/B Testing involves interaction, a hypothesis, experiment, and clear analysis of the data collected. No complicated graphs or charts are needed to present your results.
Benefits of A/B Split Testing cont’d.

05

COST-EFFECTIVE FOR YOUR BUSINESS
A/B Testing doesn’t involve the need for large-scale macro tests or implementations that could result in high costs.

06

FLEXIBILITY IN DEFINING THE VARIABLES
With A/B tests, you have complete flexibility in the range of difference between the proposed alternatives. For example, in one alternative, you may simply choose to test a change in headline copy. While in another, you may choose to completely restructure everything about the ad (layout, color scheme, text and call-to-action). This ability to mix and match allows you to test a range of alternatives in one test, without being constrained by the more granular definition of variables in a multivariate test.
A/B Testing Tips

A/B Testing is an effective and proven way to increase average order values, boost conversion rates, and drive more sales. Below are some of the tips we suggest to get the most out of your segmentation, retargeting, display ad, and Real Time Offer™ campaigns.

Your choice of the variables to test in a campaign will obviously depend on your conversion goals. For example, if your goal is to increase average order values, then you might run a test offering:

15% Off Purchases of $50 or More versus offering Free Shipping on Orders of $50 or More.

The goal of A/B Testing in this case is to figure out what deal is more enticing to visitors and to encourage them to place additional items in their cart to meet the desired average order value. In addition to context changes, there are many other elements that can be tested:

- Headline or product description (size, color, wording)
- The deal or promotion being offered (content, working, placement)
- The call to action button (e.g. the button’s wording, size, color, and placement)
- Social media buttons (size, placement, and wording)
- Creative for display ads and landing or product pages
- Amount of text on the page (e.g. short phrases vs. long descriptions)
- The exact audience segment to be targeted

If you are optimizing ads or offers for a new product or special, you may also want to test the existing ads/offers against new ads/offers containing all of the “best practices” you have discovered for designing landing pages, order pages, special promotions, etc.
A/B Testing Roadmap

When planning to perform an A/B Test, we recommend that you prepare a simple testing roadmap. An A/B Testing Roadmap will lay out those campaigns you plan to run, why you’re choosing to run these campaigns, and what you’re hoping to learn from the campaign. From here, you can easily track and monitor the results of the campaigns.

A marketer should create a schedule of A/B test ideas, and track the results so optimization is always moving forward.

In the example below, we recommend you identify the following items:

<table>
<thead>
<tr>
<th>Name of the test or an Identification Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of the test – Where on your site will the test be performed?</td>
</tr>
<tr>
<td>Start Date of the test – Make sure your start date does not overlap with other test dates</td>
</tr>
<tr>
<td>Description of the test – Describe what the test will entail</td>
</tr>
<tr>
<td>Hypothesis and/or Question – Create a hypothesis or question that determines what effect and/or result you think the A/B test will have</td>
</tr>
<tr>
<td>Impact – Create a score for the impact you feel this test will have based on a 1-3 scale</td>
</tr>
<tr>
<td>Effort – Create a score for the effort needed to implement the campaign based on the same 1-3 scale</td>
</tr>
</tbody>
</table>
# A/B Testing Roadmap Example

<table>
<thead>
<tr>
<th>TEST NAME/ID#</th>
<th>LOCATION</th>
<th>START DATE</th>
<th>DESCRIPTION/DESIGN</th>
<th>HYPOTHESIS/QUESTION</th>
<th>TEST METHOD</th>
<th>IMPACT</th>
<th>EFFORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Time Visitors Test/Test #1</td>
<td>On all product pages</td>
<td>7-Jul</td>
<td>Return customers will see an offer for “Free Shipping”; First time visitors will not</td>
<td>The “Free Shipping” text will positively impact conversion and encourage first time visitors to return</td>
<td>A/B</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Navigation Bar Test/Test #2</td>
<td>On the top bar of the homepage</td>
<td>1-Aug</td>
<td>Testing a new navigation bar</td>
<td>Does the placement of “Continue Shopping” and “Proceed to Checkout” affect conversion?</td>
<td>A/B</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Expansion Test/Test #3</td>
<td>On all product pages</td>
<td>3-Sep</td>
<td>Expanding product pages to include product previews and other features</td>
<td>Does providing a product preview increase conversion?</td>
<td>A/B</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Search Bar Test/Test #4</td>
<td>On the top search bar of every page</td>
<td>14-Oct</td>
<td>Test the search bar across the site. Needs to be touched up, and elements optimized including adding predictive search</td>
<td>Moving the product information higher up on the page will increase RPV as the customer can find the information they need faster</td>
<td>A/B/C</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Subcart Popup Offer Test/Test #5</td>
<td>On ‘Cart Details’ page</td>
<td>5-Nov</td>
<td>Half of test customers will see the subcart popup offer when adding items to their cart; Half will not</td>
<td>Leading customers through the checkout process will highly increase revenue per visitor (RPV)</td>
<td>A/B/C</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cart Button Placement Test/Test #6</td>
<td>On the 'Your Cart' page</td>
<td>3-Dec</td>
<td>Tweak subcart popup by adjusting the placement of buttons on the cart</td>
<td>A well optimized button will positively impact conversion</td>
<td>A/B</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

* This document lists a series of example A/B Tests, hypotheses and additional metrics
Measuring the Results

After allowing adequate time for your test to garner meaningful results, check in on the results of your test and compare the conversion rate of each version. It’s important to allow each A/B Test to reach statistical significance before you interpret the results. You can find different calculators online to see if you’ve reached a high confidence level in your test.

Significance is calculated using the total number of users who participated in each version of the test and the number of conversions in each version; too few users or conversions and you’ll need more data before confirming the winner. Ending a test too early can mean that your “winning” version isn’t actually the best choice, so measure carefully.

The more visitors who see your test, the faster the test will go. It’s important to run A/B Tests on high-traffic areas of your website so that you can more quickly reach statistical significance. As you get more practice with split testing, you’ll find that the more visitors who see the test, the easier it will be to reach a 95% confidence level.

When measuring results, every organization needs to determine a baseline for results that works for them. For example, a test must run for at least so many days, last no more than X amount of days, and have so many numbers of impressions, clicks, etc. (e.g. A display ad test should run at least one week, no less than 4 days, and have 100k impressions in each bucket.)
Creating A Summary of Test Learnings

Just as you need to create a schedule of A/B test ideas, it’s also important to chart out and track the results so it can be determined which tests are worth optimizing and which ones should be discarded. Analyzing the results is helpful, as the results can be used for the next tests on your testing roadmap calendar.

Similar to creating a Testing Roadmap, we also recommend creating a Summary of Test Learnings to track and monitor your A/B Testing results. Keep in mind that test results are conditional to the timeframe in which you run the test and should be reevaluated at some point in the future, typically within one year.

In the example below, we recommend you identify the following items:

- **Name** of the test or an **Identification Number** of the test
- **Start and End Dates** of the test – Make sure your testing dates don’t overlap
- **Lessons Learned** from the test – Briefly describe the lesson(s) learned from the specific test
- **Results** – List the results, preferably in the form of a conversion, AOV, or RPV percentage
- **Link to Test** – Hyperlink to the test for easy reviewing
- **Projected Year Revenue** – List the projected revenue that the result from a particular test is expected to generate
## Summary of Test Learnings Example

<table>
<thead>
<tr>
<th>TEST NAME/ID#</th>
<th>TEST DATES</th>
<th>LESSONS LEARNED</th>
<th>RESULTS</th>
<th>LINK TO TEST</th>
<th>PROJECTED REVENUE/YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Time Visitors Test/ Test #1</td>
<td>Jul 1 - Jul 30</td>
<td>The Free Shipping offer did positively impact conversion.</td>
<td>17.29% RPV</td>
<td>Test 1</td>
<td>$1,240,123 increased revenue</td>
</tr>
<tr>
<td>Navigation Bar Test/ Test #2</td>
<td>Aug 1 - Aug 28</td>
<td>Even though conversion was lower on Test A, AOV was higher resulting in a higher RPV. After extensive analysis, we found that getting customers to search resulted in more revenue.</td>
<td>4% RPV</td>
<td>Test 2</td>
<td>$124,567 increased revenue</td>
</tr>
<tr>
<td>Expansion Test/ Test #3</td>
<td>Sep 3 - Sep 29</td>
<td>Through a series of tests and continual optimization, we were able to learn that the new site is performing equally with the old site. Although this is not the result we were looking for as our initial test showed a loss of 12% in RPV. Flat, although margins went up.</td>
<td>Flat, although margins went up</td>
<td>Test 3</td>
<td>Flat - but higher margins due to increased percentage in new purchases; also increased checkout conversion rate by 9%</td>
</tr>
<tr>
<td>Search Bar Test/ Test #4</td>
<td>Oct 14 - Nov 4</td>
<td>The radical design did not work. What's not known is exactly why. Is it the information on the left, the center image, the orange price, or an orange CTA? Follow up tests needed.</td>
<td>(30)% RPV</td>
<td>Test 4</td>
<td>Saved a loss of $343,240.85</td>
</tr>
<tr>
<td>Subcart Popup Offer Test/ Test #5</td>
<td>Nov 5 - Dec 1</td>
<td>In its current location and design, the subcart popup didn't have much of an effect on RPV. It could, however, affect customer loyalty/returning customers. Will continue to test.</td>
<td>FLAT</td>
<td>Test 5</td>
<td>FLAT</td>
</tr>
<tr>
<td>Cart Placement Button Test/ Test #6</td>
<td>Dec 3 - Dec 29</td>
<td>The new placement of the button impacted conversion.</td>
<td>59.81% RPV</td>
<td>Test 6</td>
<td>$104,411 increased revenue</td>
</tr>
</tbody>
</table>

* This document describes example test learnings for the calendar year
Things to Keep in Mind When Testing

Organizations that make testing part of their culture reap true rewards. To see significant lifts in key business metrics like lead generation, sales, and conversion rates, testing must be an ongoing practice since the marketplace is ever-changing – as are consumer habits. Keep these items in mind when planning your testing and deploying changes based on test results.

**PERFORM SEVERAL A/B TESTS**
It’s possible that your first test may not run smoothly. An A/B test can have only three results – positive, negative or no result at all. The key to optimizing conversion rates is to do several A/B tests, so that all positive results add up to a large boost in your sales revenue and company goals.

**KNOW HOW LONG TO RUN A TEST BEFORE GIVING UP**
Ensure you’re running the test for a long enough time period, and engaging a large enough test audience to garner meaningful results. Also, we suggest the use of a campaign calendar (see an example on the next page).

**MAKE SURE TO SHOW REPEAT VISITORS THE SAME VARIATIONS**
This prevents mix-ups, such as showing a visitor a different message or a different promotional offer.

**MAKE SURE YOUR A/B TEST IS CONSISTENT ACROSS THE WHOLE WEBSITE OR PRODUCT PAGE**
If you are testing a discount button that appears in multiple locations, then a visitor should see that same variation everywhere. Showing one variation on one page and another variation on another page may skew results. This is called “carrying the scent” of an A/B test campaign.

**FOCUS ON CONVERSIONS**
The important metric is not the amount of traffic that’s driven to the pages and campaigns you are measuring, but rather the number of conversions and the difference in the number of conversions between versions A and B of your test.
Real Time Offer™ Cases

AN INCENTIVE TO SPEND MORE INCREASES AVERAGE ORDER VALUES BY 95%

A popular online boutique retailer of hats, Hats in the Belfry, wanted to determine what offer campaign would provide the highest return. The retailer tested two Real Time Offer campaigns targeted at shoppers with a minimum cart value of $50. Both offers were placed prominently on the side navigation bar of their site’s product pages and carried over the same look, feel, and message.

TEST ONE
Take 15% off of orders over $75

TEST TWO
Take 15% off of orders

SEGMENT TESTED
Users with $50 of merchandise in their cart

RESULT
Through the use of A/B Split Testing, the retailer found that by encouraging low-spending shoppers to add at least $75 worth of items to their cart in order to receive a 15% discount, average order values increased by 95%
Real Time Offer™ Cases cont’d.

AN ENGAGEMENT OFFER TARGETED AT SITE VISITORS INCREASES REVENUE PER VISITOR

EVO, an outdoor apparel, sunglasses, and accessories retailer wanted a way to increase their revenue per visitor, but was reluctant to try incentives or offers. By implementing a simple A/B test to determine if an offer would in fact increase RPV without ruining their bottom line, the retailer ran a test offer of 15% off an entire purchase. The offers were split and targeted at anyone who visited the shopping pages on the retailer’s website.

**TEST ONE**
Take 15% off entire purchase

**TEST TWO**
Control Group

**SEGMENT TESTED**
All site visitors

**RESULT**
Through the use of A/B Split Testing, the retailer found that incentivizing shoppers with a live offer did in fact lift conversions as it resulted in a 28% lift in revenue per visitor.
Real Time Offer™ Cases cont’d.

A DISCOUNT OFFER DELIVERS IMMEDIATE RETURN ON INVESTMENT (ROI)

Kitchen appliance retailer Cooking.com wanted a way to measure the ROI from offering a discount to their shoppers. To do so, the retailer ran two test offers – one offering $10 off an entire purchase and the other offering $15 off an entire purchase. The offers were split and targeted at anyone who visited the shopping pages on the retailer’s website.

**TEST ONE**
Take $10 off entire purchase

**TEST TWO**
Take $15 off entire purchase

**SEGMENT TESTED**
Engaged non-purchasers

**RESULT**
Through use of A/B Split Testing, the retailer found that incentivizing shoppers with a live offer did in fact lift conversions as the $15 Off coupon resulted in a higher lift in revenue per visitor – a 15.76% lift – than the $10 off coupon.
Conclusion

Gone are the days when retailers are forced to rely solely on speculation or “stale” data. They can now rely on LIVE behavioral data generated by actual site visitors, in real time, and then apply this data to their A/B Split Testing campaigns.

Through the ability to test new campaigns, retailers are able to deliver the best possible retargeting, display ad, and Real Time Offer™ campaigns to drive their site visitors to take action. If an action can be measured, it can be improved through the process of A/B Split Testing, thus helping retailers to continually drive sales and increase conversions.