

WHITE PAPER

# Successful Web Site Testing Practices

Ten best practices for building a world-class  
testing and optimization program

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September 25, 2012

SITESPECT

The logo for SiteSpect features the word "SITESPECT" in a serif font. Below the text are five horizontal bars of different colors: orange, green, purple, yellow, and blue.

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## Executive Summary

Evidence-based decision making and a more data-driven approach towards business have become very popular in recent years. Inspired in part by Tom Davenport and Jeanne Harris's *Competing on Analytics*<sup>1</sup> and Ian Ayres' *SuperCrunchers*,<sup>2</sup> business leaders around the world are increasingly focused on taking a more thoughtful and scientific approach towards improving the online experience of their customers. This trend has increased to the point that Web Analytics Demystified strongly believes that while the current decade has been largely about "online measurement," the coming decade will be all about "ongoing optimization."

What most business leaders don't realize, however, is that testing is a process that needs to be tightly integrated into the existing business. Good A/B and multivariate testing *starts* with technology, but quickly moves beyond software to people and business process. In Web Analytics Demystified's opinion, attention to people and process differentiates "good" testing organizations from "great" ones. To this end, Web Analytics Demystified, in partnership with SiteSpect, has produced this best practices document for testing success.

Our goal is to outline a handful of the non-obvious requirements for testing organizations—ranging from creating a Testing Team to considering the use of *post hoc* segmentation and the exploration of testing data using SAS, SPSS, and other analytical packages widely deployed in the Enterprise. Our hope is that this white paper will provide readers with a companion to the resources already provided by world-class testing vendors like SiteSpect and their competitors.

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<sup>1</sup> <http://www.babsonknowledge.org/analytics.pdf>

<sup>2</sup> *Super Crunchers*, Ian Ayres, Bantam, 2008

## The Mandate for Online Optimization

One of the great advantages conferred to marketers and web analysts in digital channels is the sheer volume of data generated about visitor and customer behavior. We often think about the online world as “infinitely measurable” and an entire industry has developed around the collection, processing, and presentation of this voluminous data. Companies such as WebTrends, Coremetrics, Omniture, and Google have all built digital analytics suites capable of reporting on the digital world, and theoretically these applications are used with the ultimate goal of improving the online customer experience.

Unfortunately, the vast majority of analytics end-users fail in their efforts to translate reported data into customer-benefiting actions. While many have become adept at “looking back” and providing management with a summary of past efforts, few have taken the next logical step and implemented a structured program for converting insight into action—making the data actually work for the business. And while knowing the true number of companies taking advantage of digital analytics varies, one of the surest pieces of evidence is the presence of technology to facilitate ongoing testing and optimization.

Testing and optimization technology are the “missing link” between knowing you have an opportunity for improvement and actually taking action on that knowledge. Sometimes referred to as “A/B testing” or “multivariate testing,” these solutions provide the business with a structured and scientific way to determine the incremental value of changes made in the digital realm. More importantly, especially in the aftermath of the economic conditions that shaped 2008 and 2009, testing is the *most effective strategy* for making the most of a bad situation and is *fundamental* to calculating the return on investment from an organization’s broad measurement and optimization efforts.

Regardless of whether your business is still building out a “Web 2.0” presence, being constrained by shrinking budgets, or working under the mandate to “go mobile,” Web Analytics Demystified strongly recommends the use of testing technology to make the best possible decisions. With testing in place, the traditional “highest paid person’s opinion” can be augmented with comparative data coming directly from the most important decision makers: **your visitors**.

## What Does “Online Optimization” Even Mean?

According to Wikipedia, A/B testing is “a method of advertising testing by which a baseline control sample is compared to a variety of single-variable test samples in order to improve response rates. A classic direct mail tactic, this method has been recently adopted within the interactive space to test tactics such as banner ads, emails, and landing pages.” While technically correct, Web Analytics Demystified believes the most important piece of this definition is the phrase “classic direct mail tactic”—web site testing and optimization is only new in application, *not in practice*.

Multivariate testing, on the other hand, is like running many A/B tests at the same time, where there are multiple elements being tested in combination with each other, such as headlines, images, copy, calls-to-action, for example. Multivariate testing not only shows you which overall combination of elements performed best, but also lets you differentiate how each *individual element* influences visitor behavior.<sup>1</sup>

For decades marketers have been making subtle changes to message, content, and creative in direct response vehicles such as mail, catalogs, and advertising in an effort to determine which combination of approaches will produce the greatest response on the part of the consumer. Offline, this requires printing and otherwise physically producing direct response vehicles that are deployed into the “real world” via traditional marketing channels. Measures of success are typically well-defined and supporting data is painstakingly collected.

In the online world, the entire process of testing can be incredibly streamlined. No printing or physical production is required, audiences are typically very large, segmentation strategies are numerous, and measures of response are supported by the “infinitely measurable” medium that the Internet has become. The best direct marketers would be loathe to spend money on direct response *without* spending the time to ensure the greatest response possible; this of course begs the question, “Why do so many online marketers fail to test?”

At Web Analytics Demystified, our core belief is that marketers fail to test because online testing is poorly understood. The theory is sound but as with anything technical, the devil is in the details. And like web analytics, *online testing and optimization can be hard*. We do not say this to dissuade you—we say this because in our experience it is fundamentally true, and the truth is a powerful ally when setting organizational expectations. Armed with clear expectations, the online marketers you’ll read about in this document have been able to do great things—increase conversion, drive engagement, and gain tremendous efficiency with their marketing dollars.

<sup>1</sup> <http://www.sitespect.com/resources/sitespect-multivariate-testing-info-brief.pdf>

## The Web Site Optimization Ecosystem

One important expectation to set up front is that testing does not happen in a technology vacuum. Rather, the technology that powers A/B and multivariate testing needs to be deployed as a component of a broader Web Site Optimization Ecosystem (Figure 1).

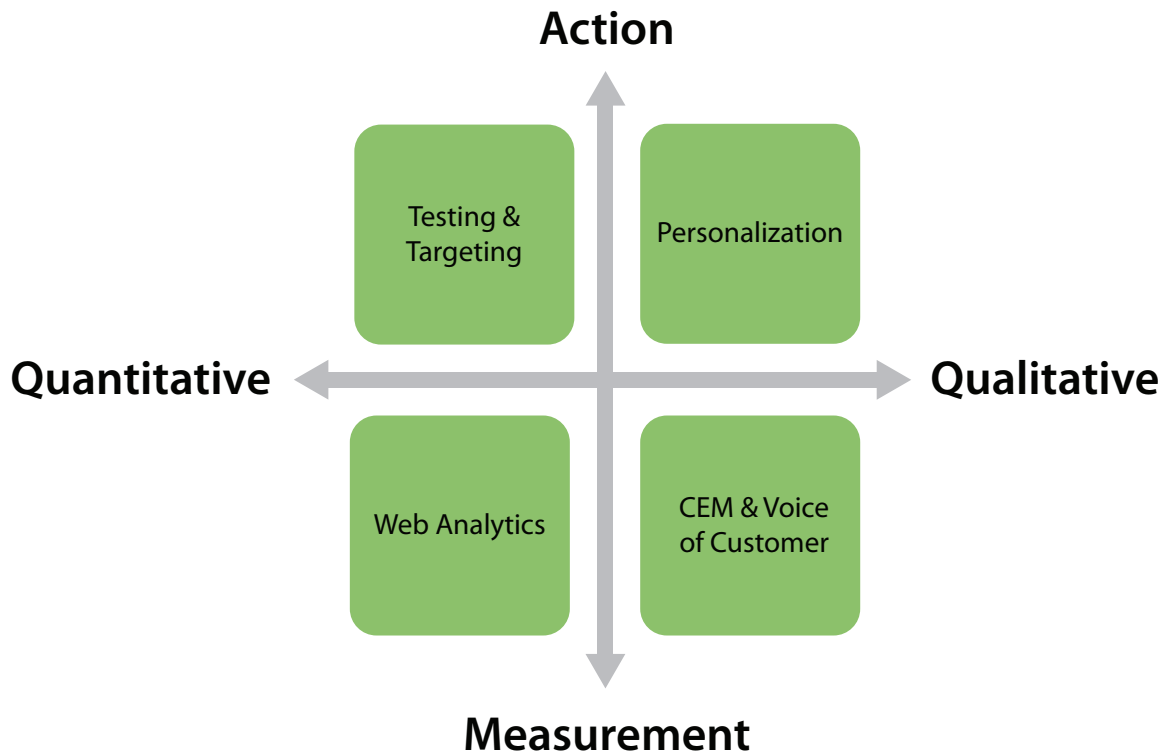


Figure 1: The Web Site Optimization Ecosystem, first described by Web Analytics Demystified in 2007. For more information, please visit [www.webanalyticsdemystified.com/research](http://www.webanalyticsdemystified.com/research).

The Web Site Optimization Ecosystem has been documented at length elsewhere,<sup>1,2</sup> but we have never drilled down into the specifics of how the “Action” tier interacts with the “Measurement tier” (web analytics, voice of customer, customer experience management.) This interaction is largely as you would expect: measurement supports the identification of opportunities to test and helps to validate the impact of testing on the broader customer relationship.

The most important consideration regarding the Ecosystem and testing is: *If you are not testing, you are not taking the fullest advantage of the measurement technologies you have already deployed.* Measurement without testing is like driving with only your rear-view mirror—not only can you not see what is coming, but this dangerous practice has great potential to negatively impact your long-term prospects. The rear-view mirror gives you an accurate view of where you have come from, but *does nothing* to help you decide where you are going.

<sup>1</sup> [http://www.foreseeresults.com/Form\\_Epeterson\\_WebAnalytics.html](http://www.foreseeresults.com/Form_Epeterson_WebAnalytics.html)

<sup>2</sup> [http://www.tealeaf.com/resources/asset-library/asset\\_library\\_reg.asp?doc=22](http://www.tealeaf.com/resources/asset-library/asset_library_reg.asp?doc=22)

## Testing Technology: Limits and Opportunities

Even with testing technology in place, companies quickly discover that software is no panacea; digital analytics require a clearly defined organizational strategy, and the strategy needs to be firmly grounded in powerful technology, smart people, and a well-defined business process. Unfortunately, without investment in people and process, online optimization efforts become technology projects, most of which are doomed to fail. In other words, if you're not willing to create a digital measurement strategy that includes an investment in people and attention to process, *you're better off not investing in testing technology.*

To be fair, the best testing solutions in the market today have focused their efforts on making their products easy to use, primarily in an effort to remove common development and IT-related roadblocks from ongoing testing efforts. Still, streamlining technical resources *out* of the equation does not obviate the need for staff to manage testing and defined organizational process and governance. To this end, Web Analytics Demystified has compiled "Ten Best Practices for Testing Successfully." These practices look beyond the obvious need for technology and explore the non-obvious requirements that have made the companies interviewed so successful.

## Ten Best Practices for Testing Successfully

The decade ending on December 31, 2009, in retrospect, will likely be known for having been focused on “online measurement.” During this time period, tens of thousands of companies recognized the need to have web analytics, voice of customer, and customer experience management solutions in place to help justify billions of dollars of marketing and developmental efforts in online channels. What’s more, thanks to freely available web analytics solutions from Google and Yahoo, many more small business owners had their eyes opened to the idea of measurement.

Web Analytics Demystified believes that the upcoming decade will be focused on “online optimization.” Based on our own observations and the Web Analytics Association’s reporting that nearly 60 percent of measurement professionals surveyed are focusing on A/B and multivariate testing,<sup>1</sup> the opportunity is clear. Forrester also reports that most companies actively testing today report performing between five and ten tests per month with some 10 percent of companies performing more than 15 tests per month. These data combined, we predict, will lead to a rapid increase in widespread awareness of the value of testing.

Given that “testing-done-right” frequently leads to measurable financial improvement, we are collectively on the cusp of a period of “customer experience enlightenment”—an experiential nirvana if you will—where web site operators actively start to incorporate customer opinion into the design process thanks to the ability to “vote with clicks” on a wide scale. Properly executed, this enlightenment will simultaneously lead to increased customer satisfaction *and* increased revenues through the online channel.

Everybody wins.

Still, before this paradigm shift can occur, site operators and marketers need to widely adopt testing and optimization tools. And to be successful with these deployments, companies need to think beyond technology and begin to consider the non-obvious requirements for success through testing. We’ve created this white paper to help companies think through some of these requirements in order get a head start when they are considering starting or reinvigorating their testing program.

<sup>1</sup> Web Analytics Association Outlook 2008: Survey Report ([www.webanalyticsassociation.org](http://www.webanalyticsassociation.org))

## Best Practice #1: Form a Great Testing Team

John Donne said that “No man is an island” and in testing this is more true than not. Unlike in web analytics where one good analyst can provide great insights, the testing process is typically too political and requires too many resources to be executed alone. Consider what can be involved in making a change to a web site:

- Someone decides that a change is warranted.
- Management needs to review the change request, and if approved, initiate the change management process.
- Depending on the change, developers, designers, marketers, and copywriters may be required.
- Information Technology needs to deploy the change.
- Quality Assurance needs to test the change.
- Analytics needs to validate the change.

Now, compare that to situations where a testing program is in place. Instead of someone deciding a change needs to be made, marketers ask themselves, “what would happen if we changed X, Y, or Z, or even all of them?” While the best testing solutions help to minimize the need for some of the resources required—most commonly developers and IT—there is still a need for a cohesive group to create and run tests, and analyze their results.

Web Analytics Demystified recommends addressing this need head on by forming a “Testing Team” of appropriate resources within your organization. Then give this team a mandate for improvement and allow them to incrementally prove their value and earn the right to test increasingly large projects. Assign your internal super-stars to this team to couple their insights with technology and process capable of measurably demonstrating their brilliance. Give them access to other internal resources, at least as long as they continue to produce results.

The two most important roles on your Testing Team are the project manager and the executive sponsor. The project manager needs to be someone who combines incredible organizational skills with a shocking enthusiasm for change. Their role is to ensure that defined testing processes are followed to the letter, thereby increasing the likelihood of successful tests. This person does not have to be a jack-of-all-trades, but they have to know Jack (or Jill) to get their job done:

- The skills to produce a sound statistical design are not required, but the ability to understand basic statistical principles is.
- The skills to create brilliant design are not required, but the ability to think from the perspective of an end user is, because visitors do not interact with your site the way you think they do.
- The technical skills to write JavaScript, HTML, or ActionScript are not required, but the ability to keep all resources—technical or otherwise—on task and on time is. Seamlessly juggling people, process, and technology are the hallmarks of an effective project manager.

According to John Stansbury, Director of Analytics and Testing at CreditCards.com, the two most important requirements for a testing project manager are the ability to tell a story and the ability to work closely with other people. “Testing is really a sales job,” says Stansbury. “You need to be able to convince people about the opportunity, set expectations, and manage the flow of things to be successful.” CreditCards.com has a full-time employee dedicated to testing projects, and this person’s addition has dramatically improved the company’s testing efforts.

The executive sponsor’s role is obvious: without an internal champion for change on the management team, most testing projects are dead in the water. Fortunately there is a new class of digitally minded executives who are actively signing up to manage testing projects. These soon-to-be “rock-stars” clearly see the opportunity available and want their names associated with the financial gains that testing so commonly produces. They also recognize the value of using testing to prevent mistakes from happening and are just as happy to report saving the company millions as they are reporting incremental revenue.

Finally, make sure to socialize the Testing Team’s efforts throughout the company. Doing this—essentially announcing to the world your commitment to optimization and demonstrating this commitment by assigning some of your most valuable resources—has a two-fold effect. First, it clarifies to other internal resources why their content is changing in a seemingly random way. Second, it creates an expectation for the Team to produce and gives them a platform to talk about their successes and failures. Obviously, building and socializing a team like this requires senior management’s support.

## Best Practice #2: Get Your Stakeholders on Board

During every interview conducted for this white paper, one message was repeated loud and clear: *management's support for testing projects is absolutely critical.* Fortunately, each of the companies we talked with had management support and interest—to the point of the CEO stopping by the testing project manager's desk many times a week to see how tests were coming along in one case. While *Web Analytics Demystified* does not believe that the CEO necessarily needs to be involved, having buy-in from members of the senior management team will make or break testing efforts.

Consider again what is required to make changes to any modern web site as described in Practice #1. Each of those functional groups has a senior manager who is inevitably being pulled in hundreds of directions at once and being asked to do so with fewer people and less money. Approaching someone in this position and asking for resources without clearly explaining the mandate, methods, and expected outcomes usually produces the exact answer you would expect.

A better strategy is to work with these stakeholders from the beginning—in concert with the executive sponsor—and directly solicit their feedback, suggestions, and ideas that can be tested by the newly formed Testing Team. While soliciting ideas has the potential to sidetrack the testing team with “pet projects” driven more by seniority than need or opportunity, the reality is that making changes to the site is as much political as tactical. Failing to consider the politics of the situation and attempting an end-run—“embarrassing the boss” as one consultant bluntly puts it—does little to promote the value of testing.

A better approach employed by one of SiteSpect's customers was to establish a “Multivariate Testing Steering Committee” made up of senior people who are helping to decide what will be tested, when, and how. According to the company's Vice President of Global Analytics and Optimization, “I have always found testing to be more difficult than many make it out to be. Especially when we're testing application functionality. To this end, the Steering Committee is helping to ensure that we have the right resources to test *both* the simple things and the really ugly stuff.”

The short-term goal of most companies testing efforts is to interject a little more evidence-based decision making into an otherwise personality and politically driven process. Ultimately these efforts are usually undertaken in order to create a more “data-driven” culture within the organization, one that is able to better compete in the global marketplace by leveraging the skills Tom Davenport and Jeanne Harris described so accurately in *Competing on Analytics*. But, as you can imagine, companies do not become analytical competitors overnight. In our experience, an excellent strategy for driving the shift towards digital analytics excellence is working directly with senior management to begin interjecting *more data* into the web site planning, design, deployment, and revision process.

One company that clearly gets testing is QualitySmith.com. Led by Jane Buck, Executive Vice President of Marketing, the company is aggressively using testing to generate leads for contractors and improve the return on investment they get from a multi-million dollar annual investment in search marketing. “Everyone here has seen the value that testing can provide,” says Buck. “I have a clear mandate to drive the numbers and I have built a team around me that is able to leverage testing towards this end.”

John Stansbury, Director of Analytics and Testing at CreditCards.com, has a similar experience. “Early on, my Vice President and I showed both how much incremental revenue and operational savings could be gained through testing,” said Stansbury. “At this point, we have saved significantly on opportunity costs based on better prioritization driven by testing, and analysis of tests is going all the way up to our CEO.”

Depending on your company, the process will differ slightly, but Web Analytics Demystified strongly recommends socializing the testing program with senior management early on. You will undoubtedly need their support to assemble the Testing Team and will often need budget, approval, or assistance getting testing technology deployed. By approaching management with a clear plan for success, you are far more likely to gain their critical support and validation for your work.

## Best Practice #3: Write a (Formal) Testing Plan

Another important finding of this research was that companies with highly successful testing and optimization programs have a very formal process for requesting and planning tests. Despite the fact that some in our industry love to proclaim, “Test early, test often, test aggressively,” the reality is that good testing can be quite involved and results are usually commensurate with effort. Absent a structured plan for testing, it is incredibly easy to end up with meaningless data, wasted time, and frustrated internal stakeholders.

Fortunately, developing a test plan is quite simple. The major areas that *Web Analytics Demystified* recommends for inclusion in the plan are:

- 1) What is being tested?
- 2) Why is it being tested?
- 3) What are the expectations for the test?
- 4) What are the measures of success for the test?
- 5) What are the risks associated with running the test?
- 6) What internal resources are required to run the test?
- 7) Who is requesting the test?
- 8) By when are results needed?

Individually, each of these questions is relatively easy to answer. Some are technical (“what risks are there” and “what resources are required”), some are theoretical (“what are the expectations”), and some are political (“who is requesting” and “by when are results needed?”). The best answers are not page-long explanations; rather, concise explanations designed to help the Testing Team best plan for the deployment of the test.

Most people initially get stuck answering questions three, four, and five. Measures of success and risks associated with testing are important enough issues that they merit their own best practices. Expectations are tough, at least until you start to get the hang of testing, because it is impossible to know ahead of time whether a change will result in a substantial improvement, a small improvement, or a net decline.

At CreditCards.com, John Stansbury realized that their success with testing was driving “too much interest” and set about creating a Testing Team and test planning document that was required for all tests. “We used to say ‘Heck yeah, we can test’ but eventually that got us in trouble,” said Stansbury. “Just because you *can* test doesn’t always mean you *should* test. We implemented the test plan document to make sure we were being as efficient as possible in our testing efforts, and the document has helped greatly.”

Your Testing Team should plan to have a formal testing-planning document ready to go when you start to socialize the group with senior stakeholders. The presence of this document and a few examples of the kind of information you're looking for will go a long way towards demonstrating that you are serious about testing. Most senior executives have seen enough *ad hoc* exercises designed to drive incremental improvement during their tenure to appreciate the level of consideration a plan conveys and understand the likelihood of failure in the absence of a testing plan.

Most importantly, requiring a formal test-planning document from anyone in the organization wanting to leverage the Testing Team, including members of the Testing Team themselves, will allow the team to insert tests into a long-term schedule prioritized by opportunity, risk, and political considerations. And while *Web Analytics Demystified* does not recommend the creation of a timeline so structured that real opportunities will be lost—testing is frequently an opportunistic endeavor, especially when there is a high-level of awareness about testing efforts—having this “roadmap” for testing projects dramatically improves each test’s likelihood for being successfully executed.

Ultimately, the goal for requiring a formal test plan is to drive home an appropriate level of seriousness and rigor about testing in your organization. Especially if your results are similar to the companies interviewed for this research, your successes will breed the desire to create more successes. If any product manager who walks through the door can have his or her test jump the queue with little more than waving of the hands and saying “make the button more blue,” then you are destined to struggle to get your testing program off the ground. Conversely, if you provide clear guidance about what is required and how the requirements will be evaluated and slotted, at least in our experience, you will soon exceed your expectations and be well on your way to success!

**Web Analytics Demystified and SiteSpect have provided a sample test plan intake form in Appendix A of this document.**

## Best Practice #4: Think About Measurement

There is a very natural relationship between testing platforms and analytics applications—one is fundamentally designed to drive improvements on your site and the other is fundamentally designed to help quantify the value of those improvements. While some testing applications do a good job of helping quantify success on their own, the integration of testing with the Web Site Optimization Ecosystem measurement tier allows companies to develop a very broad view of the results of individual tests.

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Factors		Response Points		
		Begin Checkout # Hits Avg %Delta	Cross-Sell Accept # Hits Avg %Delta	Purchase Completed # Hits Avg %Delta
First-time cust. promo	Location of cross-sell items	Avg: 0.064 %Delta: 31.665	Avg: 0.003 %Delta: -9.625	Avg: 0.038 %Delta: 49.764
bonus gift 1	*	Avg: 0.067 %Delta: 36.811	Avg: 0.003 %Delta: -17.942	Avg: 0.036 %Delta: 44.662
shipping discount 2	*	Avg: 0.067 %Delta: 36.273	Avg: 0.005 %Delta: 20.311	Avg: 0.036 %Delta: 42.705
shipping discount 1	*	Avg: 0.064 %Delta: 4.931	Avg: 0.003 %Delta: -19.522	Avg: 0.034 %Delta: 7.743
*	horizontal	Avg: 0.059 %Delta: -2.577	Avg: 0.003 %Delta: -19.401	Avg: 0.032 %Delta: 2.087
*	vertical (alternate)	Avg: 0.061	Avg: 0.004	Avg: 0.031
*	(control)	Avg: 0.060 %Delta: 21.803	Avg: 0.004 %Delta: -4.435	Avg: 0.027 %Delta: 8.363
bonus gift 2	*	Avg: 0.049	Avg: 0.004	Avg: 0.025
(control)	*			

Figure 2: Example of multivariate test analysis in SiteSpect.

On the subject of measurement, one point that is very important and frequently overlooked is: *The combination of measurement and testing should support both optimization and an incremental learning process about your visitors and customers.* Assuming you have a robust measurement program already in place, the integration of testing into those efforts is often trivial and requires little more than patience. The upside from taking the time to integrate these systems correctly includes the ability to evaluate testing efforts over multiple criteria and the ability to evaluate test participant behavior over multiple sessions.

It is quite common for seemingly dramatic design changes to have no significant impact when examined using simple measures such as click-through and conversion rate. An increasing number of companies have started leveraging more complex measures such as “return visitation rate,” “lifetime customer value,” and using more qualitative measurement systems to develop a more holistic view of test impact. For example, Ask.com examines their testing efforts in both quantitative and qualitative terms, using their Voice of Customer system to ask test participants questions about “likelihood to return,” “likelihood to recommend,” and overall satisfaction.

Site Usage		Goal Conversion					
<b>Visits</b> <sup>?</sup> <b>58295</b> % of Site Total: 22.30%	<b>Goal1:</b> <sup>?</sup> Begin Checkout <b>6.75%</b> Site Avg: 6.02%	<b>Goal2:</b> <sup>?</sup> Cross-Sell Accept <b>0.32%</b> Site Avg: 0.20%	<b>Goal3:</b> <sup>?</sup> Purchase Completed <b>3.28%</b> Site Avg: 3.12%	<b>Goal</b> Conversion Rate <b>3.45%</b> Site Avg: 3.11%	<b>Per Visit</b> <sup>?</sup> Goal Value <b>\$16.34</b> Site Avg: \$14.92		
	User Defined Value	Visits ↓	Begin Checkout	Cross-Sell Accept	Purchase Completed	Goal Conversion Rate	Per Visit Goal Value
1.	<a href="#">sstcid=1311&amp;ssvgid=45333</a>	3835	6.10%	0.26%	4.50%	3.62%	\$15.20
2.	<a href="#">sstcid=1311&amp;ssvgid=45334</a>	3783	5.90%	0.41%	3.12%	3.14%	\$18.45
3.	<a href="#">sstcid=1311&amp;ssvgid=45335</a>	3960	6.70%	0.38%	2.99%	3.36%	\$17.70
4.	<a href="#">sstcid=1311&amp;ssvgid=45336</a>	3777	5.30%	0.29%	3.30%	2.96%	\$14.10
5.	<a href="#">sstcid=1311&amp;ssvgid=45337</a>	3867	5.92%	0.27%	3.42%	3.20%	\$14.80
6.	<a href="#">sstcid=1311&amp;ssvgid=45338</a>	3825	6.13%	0.33%	3.10%	3.19%	\$15.90
7.	<a href="#">sstcid=1311&amp;ssvgid=45339</a>	3873	6.02%	0.40%	2.95%	3.12%	\$16.50
8.	<a href="#">sstcid=1311&amp;ssvgid=45340</a>	3846	7.20%	0.41%	3.41%	3.67%	\$17.25
9.	<a href="#">sstcid=1311&amp;ssvgid=45341</a>	3858	5.30%	0.34%	3.32%	2.99%	\$17.10
10.	<a href="#">sstcid=1311&amp;ssvgid=45342</a>	3738	7.90%	0.31%	3.70%	3.97%	\$16.35

Figure 3: SiteSpect data flowing into Google Analytics, showing how test variations cause users to behave.

While the specific measures you take will likely vary from test to test, depending on the systems you have in place, an important consideration is the ability to integrate these systems. The basic integration of testing and measurement systems involves exchanging data about test participation, either through an after-the-fact bulk data loading or through real-time tag transformation.<sup>1</sup> Done well, this type of integration allows the measurement team to create segments, build key performance indicators, and drill down into the activity of individual visitors based on test participation (through the use of data warehousing and customer experience management technologies).

Web Analytics Demystified recommends talking to your measurement vendors about how these systems can be integrated. The integration of measurement and testing is designed to help you better quantify test performance and the resulting impact on the business. Integrated systems, when properly used, support a wide range of metrics and measures and support the analysis of both short- and long-term impact of tests. The long-term view towards testing is one that few companies currently take today, but this view most often reveals a great deal of insights about visitor behavior.

<sup>1</sup> <http://www.sitespect.com/resources/sitespect-watts-technical-brief.pdf>

## Best Practice #5: Clearly Define “Success” and “Failure”

A common disappointment among companies deploying testing and optimization technology stems from tests that fail to produce the type of gains expected. Seemingly without rhyme or reason, even the most dramatic design changes yield “no significant differences” based on simple measures such as click-through and even less for more involved down-stream metrics such as conversion rate. While this is the reality of testing, Web Analytics Demystified believes that much of the disappointment stems from a lack of attention to the definition of “success” and “failure” as the design or changes are implemented.

Success in testing can be measured many different ways:

- For some, “success” is a dramatic increase in a revenue-based metric, knowing that most senior stakeholders will respond to incremental revenue.
- For others, “success” is a small increase in key visitor engagement metrics, knowing that a series of small gains eventually adds up.
- For still others, “success” is a reduction in the number of problems present throughout the site, knowing that reducing barriers improves usability.
- For some, especially those with an increasingly dated site, “success” is simply being able to deploy a new look without negatively impacting existing key performance indicators.

A lack of “success” in testing is often viewed as a failure on someone’s part; in Web Analytics Demystified’s opinion, this is rarely the case. In reality, testing powers a continual learning process about your visitors and customers. If a particular image fails to increase conversion rates, you have learned that your audience does not respond to that particular image. If subsequent testing reveals that variations of the same image yield similar results, then you learn something about your audience’s reaction to the image’s content. In this context, there is no such thing as “failure” in testing, only a failure to achieve the specific defined objective.

Jane Buck, Executive Vice President of Marketing at QualitySmith.com is fairly aggressive in her testing, looking for 15% improvements from her team’s testing efforts or better. According to Jane, “Over time, all gains have a tendency to erode, so I target big improvements knowing that they will likely revert back eventually.” Not every test works at QualitySmith, but given Jane’s experience managing testing and the resources on the QualitySmith team, she is able to run dozens of tests concurrently and look for big improvements. “Thanks in part to our testing efforts, our site conversion rate is very strong,” said Buck. “A streamlined approach towards testing allows us to continue to improve our site which, in turn, is helping us improve the overall business.”

Keep in mind that not every test can yield incremental millions in revenue for your business. Some tests will fail to produce the change desired; others will yield results but not across the key performance indicators; and still others will simply fail to produce statistically relevant differences. But it is our firm opinion that there are no “failures” in testing other than a failure to carefully design your tests and a failure to carefully consider what you’ve learned.

## Best Practice #6: Test Your Test

Clearly, there is a lot involved when it comes to testing and optimization, far more than just deploying technology. But in the midst of all the information gathering and strategy work, it is important to remember that software is software and requires a certain level of attention on an ongoing basis. Especially since there is no one “standard” for how testing technology is deployed today, the onus is on each company to define a plan for making sure that tests are properly deployed, executed, and evaluated.

To this end, Web Analytics Demystified recommends keeping the following risks in mind when deploying testing solutions:

- **Testing and optimization is hard.** First and foremost, set expectations about how long the set-up will take and the effort required on the part of the organization to best leverage testing technology.
- **Implementations can be tricky.** Despite vendor promises about “just dropping some code on your pages,” most companies have relatively involved web site deployments and rarely does code just “drop in.”
- **Base code still limits what you can test.** Even well-designed testing implementations are limited in what they allow you to test without IT input. For example, testing a new landing page design and testing a new checkout flow are dramatically different and require different resources.
- **Interaction with other technology is inevitable.** Most sites have content management systems (CMS), most companies have SEO efforts in place, and most companies have web analytics of some kind... all of which potentially impact, or are impacted by, testing technology.
- **Information Technology will worry about testing.** Not surprisingly, IT usually believes that their most important function is to *not let marketing mess with the web site*. Don't be shocked if you get pushback from IT and Operations about deploying testing. More importantly, expect to hear “I told you so” if the aforementioned risks manifest.

Additionally, while all of the market-leading testing solutions provide detail about the distribution of test participation and levels of statistical validity of results, Web Analytics Demystified recommends taking the time to verify what the testing application is telling you. Especially if you are doing any kind of segmentation (see Best Practice #9) or running multiple tests at once, it behooves the Testing Team to have a solid handle on how test participants are being distributed.

	First-time cust. promo	Location of cross-sell items	Status	Assignments
<a href="#">Edit</a>	Label: CONTROL GROUP (control)	(control)	Active	3,835
<a href="#">Edit</a>	(control)	horizontal	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,783
<a href="#">Edit</a>	(control)	vertical (alternate)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,960
<a href="#">Edit</a>	shipping discount 1	(control)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,777
<a href="#">Edit</a>	shipping discount 1	horizontal	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,867
<a href="#">Edit</a>	shipping discount 1	vertical (alternate)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,825
<a href="#">Edit</a>	shipping discount 2	(control)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,873
<a href="#">Edit</a>	shipping discount 2	horizontal	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,846
<a href="#">Edit</a>	shipping discount 2	vertical (alternate)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,858
<a href="#">Edit</a>	bonus gift 1	(control)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,738
<a href="#">Edit</a>	bonus gift 1	horizontal	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,737
<a href="#">Edit</a>	bonus gift 1	vertical (alternate)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,814
<a href="#">Edit</a>	bonus gift 2	(control)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,824
<a href="#">Edit</a>	bonus gift 2	horizontal	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,723
<a href="#">Edit</a>	bonus gift 2	vertical (alternate)	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	3,800

Figure 4: Example from SiteSpect showing test campaign participation.

Success with testing depends heavily on the quality of your test design. One of the reasons we recommend requiring a formal test plan (Best Practice #3) is so that the Testing Team has as much information as possible to determine how the test should be run. Especially when you start to aggressively test, good test design helps ensure that any effects from participation in multiple tests can be taken into account, either by identification and isolation or outright removal from the result set. To this end it is reasonable to consult with someone experienced in experimental design in the online world—either from your vendor or a third-party.

There are several elements that constitute a good test design and it is important to pay attention to them. For example, you should know whether you need an A/B or multivariate test. You’ll want to pick the test array that works best for your needs, either a full or fractional factorial array. You’ll want to make sure you are running the test long enough based on traffic and conversions in order to get a statistically valid sample size. And make sure you are properly testing variations of factors. Improper factoring is caused by poor (or no) isolation of individual changes; for example, changing a headline’s text, font, color, and size all at the same time. Another mistake new testers often make is always running tests against anyone and everyone; a good test design means you are targeting your tests to a relevant audience, and then performing additional segmentation on the results.<sup>1</sup>

<sup>1</sup> <http://www.sitespect.com/resources/sitespect-run-successful-tests.pdf>

Finally, since measurement is such an important component of any testing program, Web Analytics Demystified strongly recommends making sure that test participation data is flowing between your testing and analytics applications. The most fundamental and important data to pass is some kind of test identifier—whatever value the testing application is using to keep track of the test(s) in which the visitor is actively participating.

More importantly, you need to ensure that the data is flowing into the analytics application and can be used to create appropriate metrics and visitor segments necessary for deeper analysis of the test. Simply having an ID to indicate participation in “any test” is not enough. Web Analytics Demystified recommends passing data that will allow identification of the visitor or session level for each test being run. Ideally, your analytics platform will allow you to load test metadata to increase the granularity against which analysis can be performed.

If you’re not able to get this level of granularity, don’t despair; you will surely be able to benefit from testing. But keep this practice in mind as you upgrade and evolve your measurement technology, and always look for opportunities to “dig deeper” into your test results through analytics.

## Best Practice #7: Clarify Your Testing Timeline

One of the most unfortunate mistakes that companies make when getting started with testing is to *only test for statistical significance*. A great deal has been written about test design and full factorial versus fractional factorial versus A/B testing. While these are all important considerations, in Web Analytics Demystified's opinion, none are nearly as important as having a test sample that takes day-part and day-of-week variation into account.

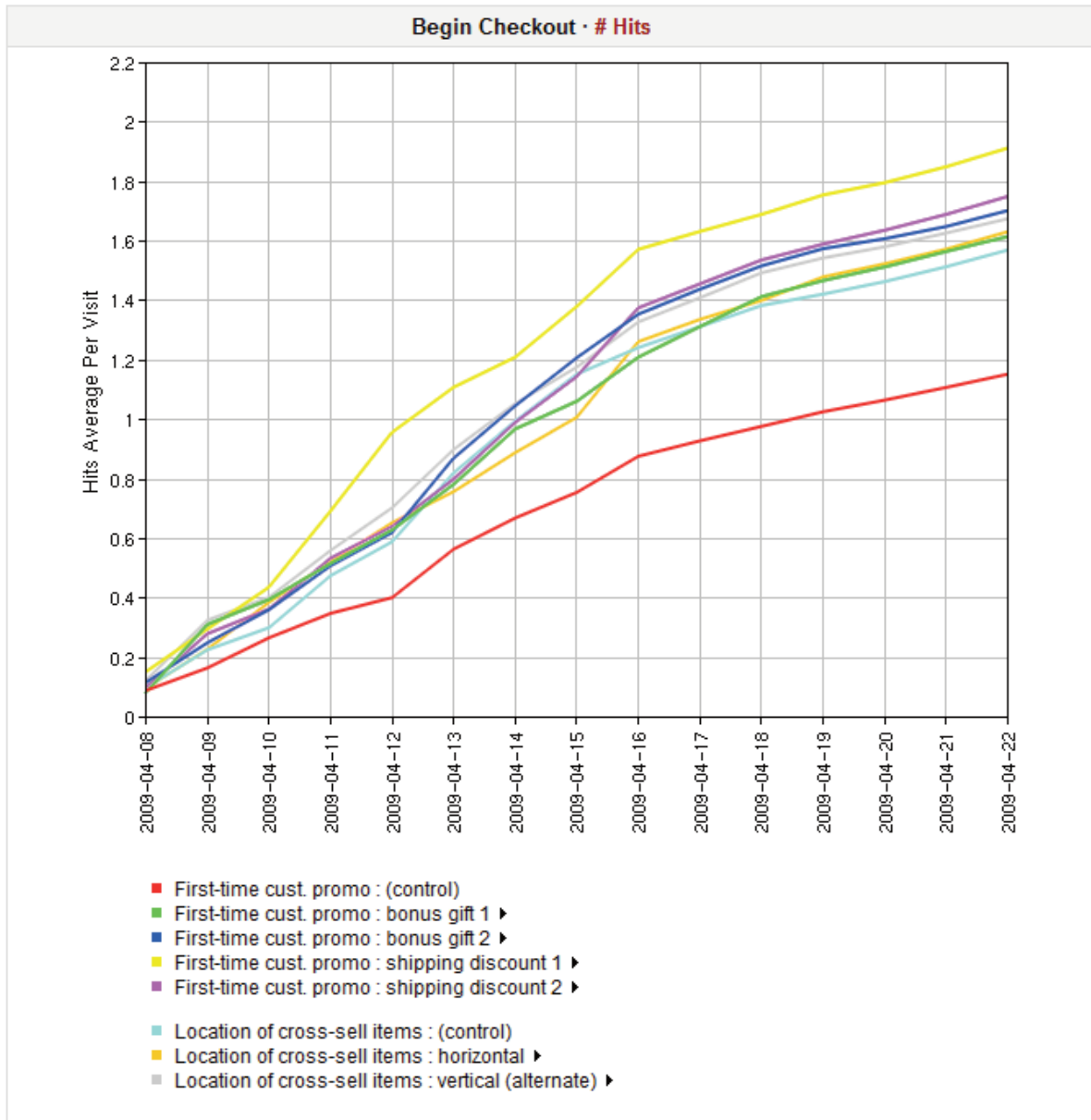


Figure 5: Tracking incremental performance (day to day) in SiteSpect.

Consider that even on the highest volume sites, there are typical peaks and valleys in traffic caused by target audience geography, marketing efforts, and the particular interaction model promoted by the site. Within each of these peaks and valleys, your site is attracting a particular *type* of visitor—late night visitors, early risers, lunch-timers across different time zones, etc. Assuming you're not trying to target a specific audience segment, a truly random sample of visitors will account for this variation and sample across these visitor variants.

In order to reduce test bias as much as possible, Web Analytics Demystified recommends a general rule-of-thumb for test planning: the "7+1" testing model. In this model you will be testing over an entire week (seven days) and building in a little extra time to make sure that you have a clean break in the data for analysis. Thus, "7+1" means running your test for a full week with an extra day on *the front end*.

By giving the test a day *before* you start actively tracking results, you allow for slippage and the need for last-minute changes, plus it gives the analysis team the ability to gather data starting at midnight at the end of the "+1" day. And by running the test over an entire week, you will account for all of the potential day-part and day-of-week variation, at least as much as is possible. If you have the luxury of time, you may want to consider extending the test to a "14+1" model, doubling the amount of time you run the test. With two weeks, you will be better able to account for additional variation in the data arising from tactical marketing efforts, a sudden increase in referral from social media, holidays, and current events, etc.

One of the advantages of the "7+1" model is that you can adjust your sample size to still only gather as much data as you need; you'll just gather that data more slowly. Rather than taking a 20% sample over four days to get statistical significance, the "7+1" model may guide you to take a 5% sample over seven days. The smaller sample lessens your risk associated with testing since if the tests fair poorly, fewer visitors will be exposed to them and you're still able to get to statistical significance in a relatively short period of time. Further, it allows non-test traffic to be eligible for assignment to other tests that you may be running concurrently.

The major complaint about the "7+1" model is that it takes time and if you just open the spigot on the test, you can achieve statistical significance in a matter of hours in some cases. While this sounds good, opening the spigot on testing is exactly how not to achieve success through testing. Unless you have a very sophisticated understanding of your audience and the sampling technique employed, the "fire hose" model will likely leave you with more questions than helpful insights. Anyone who doesn't like the results can simply argue that your sample does not represent the diversity of user types coming to the site and refuse to accept your analysis.

Whatever kind of test you are running (A/B or multivariate), you want to make sure you've run your test long enough to obtain a statistically valid sample size—the number of participants assigned to the test. Your sample size will be determined by a combination of traffic volume, your baseline (control) conversion rate, and the conversion rate observed by test participants. You'll want to make sure you obtain an appropriate sample without bias in time of day, day or week, holiday/event, etc. For example, you might run a test with a huge sample size and obtain statistically significant results in one day, but this only reflects how visitors behaved on that particular day. So take care that the test is run across a longer period of time (at least 7+1 or 14+1, and perhaps longer depending on the situation) to insure against bias.

Also keep in mind Jane Buck's experience: "I have always observed that the incremental gains we find through testing have a tendency to revert back to the mean over time. Because of this, I look for tests that will provide substantial (15% or more) improvement over the *status quo*." While this observation does not imply that you should run your tests forever looking for reversion, it is certainly worth keeping in mind; the greater the statistical validity and overall quality of your testing efforts, the greater the likelihood this reversion effect will occur more slowly.

**Remember:** the best testers work thoughtfully and carefully, and they are willing to spend a little extra time on process or testing to make sure they deliver accurate, reliable, and believable results to socialize through the rest of the organization.

## Best Practice #8: Communicate Your Test Results with Actionable Analysis

Assuming you've taken the time to form a great Testing Team, get your senior stakeholders on board, and get solid testing plans back from the organization, after you run your tests you owe it to the organization to communicate back what you learned. In Web Analytics Demystified's experience, there are two ways that companies most often communicate about test results: badly and slightly less badly. The former is usually characterized by not sharing the results with anyone outside of the group requesting the test; the latter is characterized by only sharing "good news."

Hopefully, the problem with both of these strategies is obvious. If you only share the results with the requesting group, you're missing out on the opportunity to increase institutional knowledge about your visitors. If you only share "good news" and bury the less-good stuff, you're not only missing an opportunity, but may completely fail to understand the value of testing. Failure to share at least a high-level summary of what you're learning through testing is a *failure to treat testing as a strategic business investment*.

To take full advantage of your investment in testing, Web Analytics Demystified recommends taking a two-prong approach towards the communication of results by specifically addressing the needs of your two audiences: the group requesting the test and the wider organization.

- 1. For the group who requested the test, go deep.** Plan to provide detailed information about the test and what was learned, including a reiteration of the test plan, a test timeline, a summary of resources used in the project (ideally tied to costs associated with their time), plus as much detail about the results of the test as possible, including the underlying statistical data. In our experience, it is also an excellent idea to map external events onto the test results whenever possible. For example, if you know a substantial email campaign occurred, or if the New York Times wrote about your company, add a point on your results timeline that specifically addresses those events.
- 2. For the wider organization, go broad.** The rest of the company is likely not as interested in the details of the test as they are the "big picture," including the bottom-line summary of results and a comparison of how similar tests have performed in the past. One thing that gets people's attention better than anything else is associating test results with money—either incremental revenue or operational savings. It's funny how the addition of "and we expect this change to result in an estimated \$20,000,000 in incremental revenue every year" gets people's undivided attention.

For both groups, make sure you take a *bottom-line, up-front* approach towards communication of results. By doing so, you dramatically increase the likelihood of getting people's attention to important news and allow them to make their own decision about the level of attention they give to the results. A good example of presenting the bottom-line first in email is shown in Figure 6.

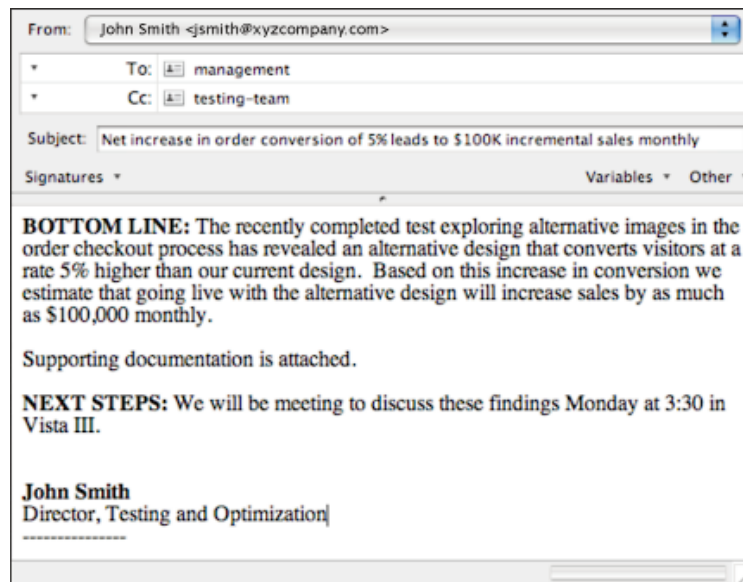


Figure 6: Example of bottom-line, up-front email communicating test results.

Additionally, *Web Analytics Demystified* recommends that whenever possible, you present test results *in person* and in a format that encourages interaction. Especially when companies are new to the testing process, this socialization helps to improve organizational awareness about testing while challenging the Testing Team to continually improve their ability to present, discuss, and defend test results. The value of the latter cannot be under-estimated since so very few employees in the workplace today have experience with testing and optimization.

Once you begin to communicate test results more openly and in person, don't be surprised about who becomes interested and at what levels. For example, Paul Terry, Senior Web Analyst at PRIMEDIA, says his company's CEO has been very engaged from the beginning. He stops by Paul's desk several times a week inquiring about how and what web site changes have improved the product. Paul is lucky that senior management understands the principles of testing and is interested in the optimization process. In terms of having a business associate help you communicate and internalize the results, it doesn't get much better than the Chief Executive Officer.

Web Analytics Demystified also recommends documenting test results electronically using an internal blog or wiki. The wiki format especially lends itself to creating a complete body of knowledge—what was the test plan, what were the measures of success, what happened and what was learned—in a searchable format. When you start to aggressively test, people’s collective ability to recall every test and all that has been previously learned becomes limited. Having a resource that can be easily searched at the onset of a new project will allow the Testing Team to build on their knowledge, and not repeat past mistakes. John Stansbury at CreditCards.com implemented something similar when it became clear to him that the company was meeting and emailing about tests they had already conducted.

The *most important thing* when presenting test results is to provide the audience with **actionable recommendations**. Nothing is less satisfying than a great presentation chock full of data with no recommendations for action—especially in the current and decidedly harsh economic climate. The best testing teams will go the extra mile and make multiple recommendations in an attempt to capitalize on the results and build consensus for the adoption of the successful challenger design. Web Analytics Demystified also recommends using the presentation of recommendations to suggest other opportunities for testing.

The ultimate goal is to build a culture of testing within your organization, one that is willing to increasingly incorporate data from measurement and testing efforts into the overall business decision-making process. Testing can be a powerful ally to business—both online and off—but only when the organization takes the time to understand what can be learned and then *act upon that information*. **The worst-case scenario in testing and optimization is one where measurement is guiding testing and testing is informing good recommendations that are ignored and not acted upon.**

## Best Practice #9: Test Different Audience Segments

Incorporating Best Practice #7 (“Clarify Your Testing Timeline”) with the need for a representative sample that is statistically significant and incorporates data from different user types, advanced testers are testing against key visitor and customer segments. The logic behind this is clear: why optimize your site for *everyone* when you can focus your optimization efforts on those visitors who have *already demonstrated value to your business*?

There are two ways to conduct a segmented test: *ad hoc* and *post hoc*. The former method requires that you are able to identify segment members in real time so that the testing engine can assign people appropriately. For example, you may be targeting “first-time visitors” or “visitors referred from Google organic search results,” which, depending on the testing platform you use, can be easily done.

Other times this may not be so easy; for example, when you’ve created complex behavioral segments in web analytics and you know these segments are likely using all the same pages on the site as segment non-members. In this case, the best guidance Web Analytics Demystified can offer is to consult your vendors. Some testing and analytics platforms can be tightly integrated so that data from one (analytics) can be easily passed to another (testing) via URL query-strings, cookies, or session objects, whereas other testing platforms actively build and keep visitor profiles that can mitigate the need for this type of integration. Either way, the implementation is likely to be somewhat involved so consulting with your technology partners is very appropriate.

The screenshot shows two examples of segment specifications in SiteSpect. Each example is titled "Segments » UK Google referred, [segment name]" and includes an "Equation:" section with three criteria.

**Example 1: UK Google referred, weekday first-visits**

- Criterion 1: Referring URL Contains google.co.uk
- Criterion 2: Total Visits (including current) is Equal To 1
- Criterion 3: Day Of Week (Sun, Mon, Tue, Wed, Thu, Fri, Sat) with checkboxes for Mon, Tue, Wed, Thu, and Fri selected.

**Example 2: UK Google referred, follow-on visits**

- Criterion 1: Referring URL Contains google.co.uk
- Criterion 2: Total Visits (including current) is Greater Than or Equal To 2

Figure 7: Example of segment specification in SiteSpect.

The latter method for segmenting is *post hoc*—after the fact—which is more an analysis technique than a testing strategy. In this case, you will mine test results for segment members and compare these results across control and test groups. This strategy also involves some work between testing and analytics vendors but is often more forgiving, especially if your testing vendor supports full data export and is able to provide the analytics vendor’s ID.

	A	B	C	D	E	F	G	H	I	J
1	User GUID	Recipe ID	VstNum	Time/Vst	Pages/Vst	Factor A	Factor B	KPI 1	KPI 2	KPI 3
2	iVbsRC0uHsCl0u8XGr0t	36953	1	150	5	32417	32408	0	0	0
3	iVbxri0uHlzO0u8pew0t	36935	1	0	1	32396	32397	0	0	0
4	iVbsRB0uHsz0u8XGk0t	36941	1	299	5	32415	32408	0	0	0
5	iVbsmq0uHsrF0u8XRA0f	36941	1	229	3	32415	32408	0	0	0
6	iVbsXM0uHsDz0u8XmW0t	36944	1	258	7	32419	32401	0	0	0
7	iVbsgM0uHszG0u8XhU0t	36948	1	152	4	32413	32401	0	0	0
8	iVbsh60uHs7p0u8XCQ0x	36942	1	514	20	32415	32406	0	0	0
9	iVbsDy0uHgHo0u8XqV0t	36941	1	55	2	32415	32408	0	0	0
10	iVbszt0uHg5M0u89HU0x	36940	1	0	1	32415	32401	0	0	0
11	iVbsqL0uHgk0u89LF0f	36953	1	61	8	32417	32408	0	0	0
12	iVbsq90uHgKi0u89cl0t	36950	1	0	1	32413	32406	0	0	0
13	iVbs870uHgFX0u89kC0t	36954	1	491	5	32417	32406	0	0	0
14	iVbs8J0uHgFq0u89KH0b	36939	1	98	11	32415	32397	0	0	0
15	iVbsnU0uHgAO0u892x0t	36939	1	0	1	32415	32397	0	0	0
16	iVbsJb0uHgU70u89YL0t	36941	1	45	3	32415	32408	0	0	0
17	iVbsJh0uHgb10u89YY0t	36946	1	0	1	32419	32406	0	0	0
18	iVbguM0uHgg10u89Z10t	36950	1	16	1	32413	32406	0	0	0
19	iVbZHQ0uHVNq0u8Ysj0t	36950	1	1034	18	32413	32406	1	0	0
20	iVbsJO0uHgbB0u89Yl0t	36948	1	793	21	32413	32401	0	0	0
21	iVbgsU0uHggI0u89ZQ0f	36949	1	577	9	32413	32408	0	0	0
22	iVbg4D0uHghV0u89mr0x	36949	1	241	17	32413	32408	0	0	0
23	iVbgEN0uHggq0u89Mz0f	36937	1	28	2	32396	32408	0	0	0
24	iVbgkg0uHg380u89qG0t	36942	1	128	8	32415	32406	1	0	0
25	iVbglU0uHgaF0u89P60t	36951	1	75	4	32417	32397	0	0	0
26	iVbgTL0uHhuU0u8sWl0p	36937	1	5	3	32396	32408	0	0	0
27	iVbgFg0uHhcl0u8sLx0t	36936	1	126	3	32396	32401	0	0	0
28	iVbgYQ0uHhEJ0u8sEP0p	36947	1	262	5	32413	32397	0	0	0
29	iVbgYz0uHhkz0u8sk30d	36949	1	172	3	32413	32408	0	0	0
30	iVbgBy0uHhli0u8sIN0f	36938	1	0	1	32396	32406	0	0	0
31	iVbgwn0uHhN70u8s2K0f	36942	1	90	11	32415	32406	0	0	0
32	iVbgGI0uHh2T0u8s2j0t	36938	1	117	3	32396	32406	0	0	0
33	iVbgbZ0uHhAX0u8sYv0t	36946	1	37	3	32419	32406	0	0	0

Figure 8: Example of SiteSpect data exported to Microsoft Excel format.

Regardless of how you produce the data, Web Analytics Demystified recommends focusing on your key segments when communicating about your test results (Best Practice #8.) If you have the data and the time, it is definitely better to be able to tell management, “The test produced a 5% lift in click-through rate across all visitors and a 15% increase in click-through rate across our most valuable customer segment.” This message should resonate loud and clear, especially if your measurement team has done a good job at leveraging visitor segmentation.

## Best Practice #10: Mine for Deeper Opportunities

When you've gained expertise at testing, the next logical step is to take the rich source of data you develop during the optimization process and leverage it using more robust data analysis and statistical modeling applications. This is not for the faint-of-heart, but if your company already has a group using SAS, SPSS, or some other data modeling and analysis application, you have a great opportunity to mine your data for truly non-obvious insights about your visitors and customers.

The opportunity is essentially what Ian Ayres talks about in his book *Super Crunchers* and an expansion of the ideas that Tom Davenport and Jeanne Harris present in *Competing on Analytics*—the idea that companies will increasingly develop a competitive advantage by investing in the creation and use of strategic data assets built from online data. An increasing number of companies are doing this based on web analytics data. Web Analytics Demystified believes there is a significant opportunity for companies to augment web analytics data with the output from testing.

Some of the insights that testing and optimization customers have already gleaned thanks to this type of data analysis include Ask.com's integration of testing and "voice of customer" software. This allowed the company to use a model derived from qualitative data to evaluate test variants that were dramatically different but failed to show any statistically relevant differences across common click-based measures. Another example is a well-known retailer that tested a new payment option integrating several data sources including online and offline data to evaluate what percentage of purchases made on the new system resulted in billing inquiries and returns.

As audiences continue to move online, our collective understanding of visitor behavior in the online channel needs to become more sophisticated as well. The use of testing technology is already a best practice from a "super crunching" perspective. Even more important, the opportunity to take the output from testing and further analyze the data for otherwise inaccessible insights will undoubtedly be one of the trademark techniques of analytics competitors of the future.

## Parting Thoughts

If you're not testing already, we hope this white paper will open your eyes to the "other stuff" you need to be thinking about as you make your initial investment in multivariate testing technology. If you've been testing for years, we have provided the evidence you need to expand your testing program or get additional resources you may need. Either way, both Web Analytics Demystified and SiteSpect encourage you to keep in mind that good testing requires more than just good software.

Like so many technologies, testing depends on a combination of people, process, and technology to create the type of successes most companies are looking for. Taking a structured and thoughtful approach, staffing appropriately, and communicating clearly about effort and expectations will allow you to join companies like QualitySmith, CreditCards.com, and PRIMEDIA who use testing to create a significant competitive advantage. These companies have already realized that testing is the gateway to true analytical competitiveness in the online world.

The authors of this paper welcome your comments and feedback. Please feel free to email Eric T. Peterson of Web Analytics Demystified directly at [eric.peterson@webanalyticsdemystified.com](mailto:eric.peterson@webanalyticsdemystified.com) or contact Eric Hansen of SiteSpect directly at [ehansen@sitespect.com](mailto:ehansen@sitespect.com).

## Appendix A: Sample Test Plan Approval Form

As discussed throughout this white paper, Web Analytics Demystified strongly recommends that the Testing Team formalize the process of requesting and justifying testing resources. The following is a sample template developed by SiteSpect and Web Analytics Demystified for use as an “intake form” for departments and groups wishing to test.

- 1. What page(s) and page element(s) are you trying to test?** Screenshots and URLs are greatly appreciated.
- 2. Why would you like to run this test?** Are you trying to increase something, decrease something, or improve how something looks? Do you have data that prompted the need for this test?
- 3. What success criteria do you have in mind for this test?** For example, will you be successful if you increase the number of clicks from the page by 10%?
- 4. What criteria would cause you to want the test stopped immediately?** For example, if the site conversion rate declines by 10% during the test, should we stop the test?
- 5. What specific measures and key performance indicators (KPIs), and which visitor segments, will you be watching during this test?** For example, click-through rate or bounce rate for first-time visitors who view the test page? Or, conversion rate across the site for all visitors?
- 6. What marketing initiatives or external factors are you aware of that could affect the test?**  
For example, will you be running an email promotion during the same time or are you changing your ad spending on search engine keywords?
- 7. What internal and external resources do you believe are required for this test?** For example, will Development or Information Technology resources be required? Are outside agencies involved in generating creative for the test? Will Sales or Finance need to be involved in the approval process?
- 8. What departments and key internal stakeholders are potentially impacted by this test?**  
For example, might this test impact sales or lead generation? Could test designs be construed as “off brand” and impact PR and marketing efforts?
- 9. Who is the most senior person in the organization requesting the test?** Is it you, your manager, your manager’s manager, or the CEO?
- 10. Ideally, by when do you need test results?** Keep in mind that test timing depends on many variables including the scope of the test, your success criteria, and other tests being run.

While these questions obviously need to be tailored to your company, both Web Analytics Demystified and SiteSpect have found this template serves as an excellent starting point to get an organization focused on the “testing process.”

## About the Author

Eric T. Peterson, CEO and Principal Consultant at Web Analytics Demystified, has worked in web analytics since the late 1990s in a variety of roles including practitioner, consultant, and analyst for several market-leading companies. He is the author of three best-selling books on the subject, *Web Analytics Demystified*, *Web Site Measurement Hacks*, and *The Big Book of Key Performance Indicators*, as well as one of the most popular web analytics bloggers at [www.webanalyticsdemystified.com](http://www.webanalyticsdemystified.com). Peterson has committed much of his life to the betterment of the web analytics community, so much so that Jim Sterne, President and co-founder of the Web Analytics Association says "Eric's leadership in the industry is unparalleled, his devotion to the community is legendary, and his years of experience translate immediately into strategic and tactical competitive advantage for everybody who works with him."

## About Web Analytics Demystified

Web Analytics Demystified, founded in 2007 by internationally known author and former Jupiter Research analyst Eric T. Peterson, provides objective strategic guidance to companies striving to realize the full potential of their investment in web analytics. By bridging the gap between measurement technology and business strategy, Web Analytics Demystified has provided guidance to hundreds of companies around the world, including many of the best-known retailers, financial services institutions, and media properties on the Internet. For more information on Eric T. Peterson and Web Analytics Demystified, please visit [www.webanalyticsdemystified.com](http://www.webanalyticsdemystified.com), email [eric.peterson@webanalyticsdemystified.com](mailto:eric.peterson@webanalyticsdemystified.com), or call 503-282-2601.

## About SiteSpect

SiteSpect enables web marketers to optimize website and mobile web effectiveness through multivariate testing and behavioral targeting. By testing variations of landing pages, product descriptions, search results, and buy-flows, SiteSpect allows marketers to fine-tune every aspect of their website on a segment-by-segment basis. As the first and only non-intrusive solution available, SiteSpect empowers marketers to optimize their sites without the need for ongoing IT involvement. SiteSpect's patent-pending technology is used by some of the world's largest and most successful online businesses, including Cabela's, CreditCards.com, iProspect, Overstock.com, PRIMEDIA, QualitySmith.com, ShopNBC, and VEGAS.com. For more information, visit [www.SiteSpect.com](http://www.SiteSpect.com) or call 617-859-1900.