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S O F T W A R E

web analytics: a day a month
web analytics demystified

AUTHOR:
Eric T. Peterson

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Introduction

*The "dirty little secret" in web analytics that few people want to openly discuss is this: **web analytics is hard!** Despite the assurances that software is "easy to install, easy to configure, easy to learn, and easy to use," most of the available evidence actually points to the entire process of measuring and analyzing your audience being difficult at best.*

Consider the following:

- In a 2007 survey conducted by Web Analytics Demystified of over 1,000 web analytics practitioners worldwide, fifty-six percent of all respondents with three or more years of experience said that *web analytics was difficult*

- Twenty-eight percent of respondents to the same survey indicated that web analytics was currently answering *less than half of the questions they had about their audience behavior and marketing efforts*

- This last number (28%) skyrockets to 53 percent for practitioners and companies new to web analytics having less than six months of experience

In addition to this data, there is a plethora of anecdotal evidence that most people actually challenged with doing web analytics struggle from time to time to be successful. The fact that web analytics webcasts held by the American Marketing Association routinely draw thousands of marketers trying to figure out how to "do more" with measurement is an indicator of both the intense interest and general difficulty that smart marketers have with the subject.

FIGURE I: Web Analytics is hard. So say 56% of practitioners with 3+ years experience.

But the fact that web analytics is hard is hardly a reason to log out, give up, and go home. Too much is at stake given projections for online advertising spend topping $36 billion in 2011 (eMarketer.) While this target may be optimistic, few would argue that online advertising isn't here to stay, and thusly the need for accurate and useful measurement remains critical.

Fortunately, we at Web Analytics Demystified are particularly optimistic about marketer's ability to be successful with audience measurement given little more than sincere motivation and a long-term strategic roadmap. Even more fortunately, the requirements for success with web analytics are modestly easy to understand and act upon for most organizations. And best of all, Web Analytics Demystified has a "twelve-step program for incredible, beautiful, amazing success" that can be executed one month at a time.
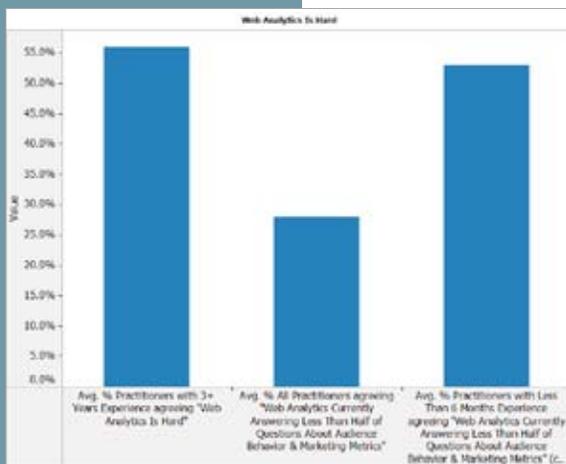
First Quarter: Refine Your Management Of The Measurement Process

In the first three months of the year you need to focus on ensuring your ability to leverage analytics insights throughout your organization. Bringing clarity to the

ownership, the goals, and the processes through which measurement will benefit the company and ultimately the customer is the first step in ensuring success through measurement.

january: clarify who "owns" web analytics

It may sound unbelievable, but far too many companies fail to assign ownership of audience measurement to someone senior enough and who has enough of the right skin in the game. But being successful with web analytics *absolutely requires* that measurement is owned by someone who has the budget, resources, appropriate relationships, and a clear and current understanding of the business. It doesn't matter if that person is in marketing, finance, information technology, research, or even the executive suite — it only matters that they understand the potential of good data analysis to impact both the top and bottom line.

Web Analytics Demystified recommends that you review the ownership of web analytics in your organization to ensure that:

a. Someone is actually responsible for measurement

b. That person has budget, resources, and the mandate to use data wisely

c. That person has the necessary clout to drive other departments and lines of business to make changes based on analysis and recommendations driven by measurement efforts

If you're not sure if ownership is a problem in your organization ask yourself this question: "If we turned off web analytics tomorrow who everyone be looking for next week?" If the answer is "nobody" then you have a problem.

february: document your business objectives

When anyone tells you that "you don't have to worry about what you're going to measure in advance, just measure everything and figure it out later" they're probably trying to sell you something. The reality is that you cannot efficiently and effectively collect and measure everything any more than you can boil the ocean with a can of sterno. To be successful with web analytics you need to have a filter through which you can plan, collect, measure, and report on data; Web Analytics Demystified recommends that that "filter" be the clear and concise definition of your site's objectives and the activities visitors engage in to satisfy those objectives.

When you've clearly defined your site's objectives and documented them using simple language like "Sell Products", "Gather Qualified Leads", and "Minimize Call Center Costs" you can then list the activities on your site that visitors must complete to help you achieve each objective. The description of activities provides the basis for your dashboards, key performance indicator report, and analysis efforts.
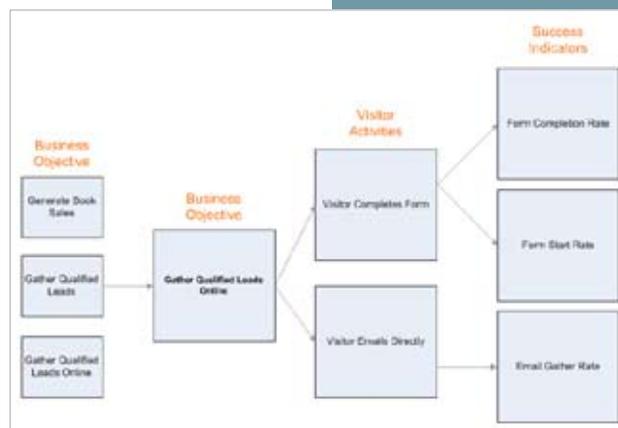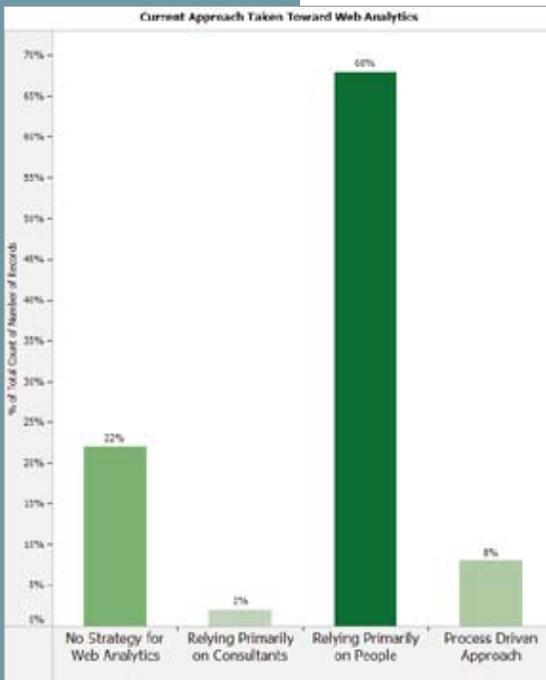
FIGURE II: Identifying your business objectives first is necessary for defining and tracking critical website activities and success indicators.

If you're not sure if you've done a good job defining your business objectives ask five different people in your organization "what are our site's objectives?" If you get five different sets of answers then you have a problem.

march: document and optimize your analysis process

FIGURE III: Over two thirds of companies (68%) rely on people to drive their analytics strategy—and almost 1 in 4 admit to having no strategy for web analytics.

The same people who want you to believe that web analytics is easy often forget to point out that measurement is process intensive. While that statement seems a tad obvious — kind of like saying "web analytics is complex" — in the same survey described earlier, only eight percent of companies *worldwide* indicated that they take a process-driven approach towards web analytics. The balance of respondents are relying primarily on people (68%), consultants (2%), or readily admit that they have no strategy for web analytics whatsoever (22%)

Defining and describing your analysis processes helps to clarify for the organization the answers to questions like:

• Who is responsible for managing the technology and data collection?

• Who is responsible for generating and distributing reports?

• Who is responsible for providing analysis and recommendations?

• Who is responsible for multivariate testing of pages and campaigns?

• Who is responsible for acting on the data?

Hopefully you can see how critical the answers to each of these questions are regardless of the size or focus of your organization. In Web Analytics Demystified's experience, companies that fail to clarify their web analytics processes often struggle to answer these questions.

If you're not sure if you have good processes for "doing" web analytics, ask yourself each of the questions listed above. If the answer to any of the questions is "I'm not sure" or "we don't actually do that" then you have a problem. If you have good answers for all the questions, briefly describe the critical processes in each area. If you cannot, and web analytics is critical to your job function, then you may have a problem as well.

Second Quarter: Evaluate Your Inputs And Outputs

Once you've set yourself up to succeed by assigning ownership, defining objectives, and documenting processes, the next step is to make sure you have the right tools for the job and that you're communicating results effectively.

april: evaluate your data collection and integration strategy

Companies have a tendency to either over- or under-collect data in their measurement efforts, especially when they haven't taken the time to document their online business objectives and activities. This issue is aggravated by "Web 2.0" technologies like AJAX, Flash, widgets, RSS feeds, and the continued explosion "Web 3.0" technologies like web-enabled cell phones driving mobile content consumption.

The fundamental challenge to marketers and business owners is to determine *which* data will help you better understand your audience. To do this efficiently, Web Analytics Demystified recommends conducting a simple data source review and reconciliation project, essentially a three-step process:

1. List your business objectives, activities, and critical questions you have about each
2. List all of the sources of data you have at your disposal that impact or answer each of the items listed in the first step
3. Build a matrix of questions and data sources that can be used to answer them, carefully noting the *availability* and *integration status* of data for each

As a bonus step, Web Analytics Demystified recommends using a data analysis environment to vet the quality and combinability of data *prior* to starting complex and often costly data integration projects.

If you're not sure if you're data collection and integration strategy is robust, build the matrix described above and count the number of unanswered or poorly-answered questions. The larger the number of questions lacking good answers, or the presence of unanswered questions deemed critical to the business, the greater the likelihood that you have a problem.

may: review your existing technology vendors and deployment

The web analytics/web data marketplace in 2008 is very much in a state of transition. Several historically strong vendors have had some type of major management transition, been part of a highly impactful financial transaction, or both! While consolidation activities are likely to slow, a contraction in the marketplace is likely to follow in 2008 and 2009.

Regardless of whether you're working with a market leader unlikely to fail or a smaller vendor where the risk is greater, Web Analytics Demystified recommends conducting a vendor suitability review to assess the long-term viability of your existing solution *to satisfy your short- and long-term needs*. Do this by gathering your senior analytics stakeholders together and asking them about your current solution:

FIGURE IV: It's a fundamental challenge to determine which data will help you better understand your audience. Here an online marketer is able to integrate traffic data with order amounts to find out which keywords are most optimal.

- Ask **information technology** about the quality of data integration tools?
- Ask **operations** whether the solution requires appropriate resources to maintain?
- Ask **research** about multi-dimensional analysis and complex visitor segmentation?
- Ask **marketing** about support for dashboards, robust reporting *and* analysis?
- Ask **finance** if it comes from a strong, stable company likely to be around next year?

Obviously the greater the number of "no", "not good" and "we're not sure" answers you get, the greater the likelihood you have a problem. Especially in the context of the Internet getting more complex and the inevitability that you'll need to integrate multiple sources of data for analysis and segmentation, if you struggle with this today, you simply may not be working with the right vendor.
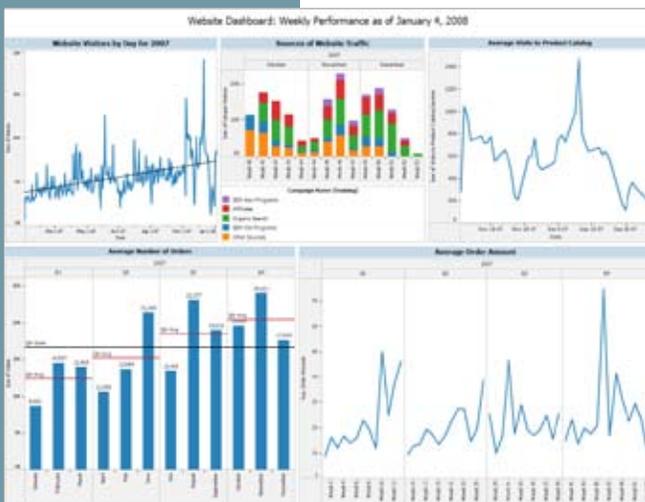

FIGURE V: To optimize your analytics communication strategy, find ways to make that process consistent and direct—like this dashboard

june: optimize your analytics communication strategy

There are many different ways to communicate web analytics data — dashboards, key performance indicator reports, application-specific reporting environments, widgets, Excel reports, PDFs, PowerPoint presentations — the list goes on and on. The fact that audience measurement data is often complex and based on obscure and archaic definitions only makes things worse, the only absolute truth is that no one approach will work for everyone, and any attempt to enforce a single strategy is likely doomed to fail.

Web Analytics Demystified strongly recommends that when it comes to communicating about web analytics that you "think different." To determine whether you need to do this, take the data communication test:

1. Deliver reports on Monday; call Tuesday and ask a question about the data
2. Deliver last week's report this week; see if the recipient notices or complains
3. Change all the colors in the report; see if the recipient notices
4. Stop delivering the report; see if the recipient complains
5. *Stop delivering all reports*; see if anyone complains

Obviously step five is a tad extreme, but you would be surprised at the number of anecdotal instances of analysts doing exactly this — stopping all regular report delivery — only to not have one person complain. If you don't get the right response to this test, you have a problem with your data communication strategy.

If this is the case, Web Analytics Demystified recommends that you embrace "think different" and consider alternatives such as:

- An internal newsletter
- An internal blog, online forum, or Wiki
- Presentations delivered in person, not just sent via email
- A podcast, vidcast, or some other type of recorded multimedia presentation
- Contests for the best question, the best analysis, or the best response to regular data

Obviously if you chose an online strategy, don't forget to measure the adoption and use of the alternative, keeping in mind that you'll have to work overtime to evangelize for the new strategy.

Third Quarter: Examine Your Commitment To Success Through Analysis

In Q3 it's time to start getting serious about web analytics and take a long, hard look at how you're staffed for success, how you produce analysis, and how you take advantage of the insights that web analytics is able to provide.

july: examine your commitment of human resources

Web analytics is hard but not impossible, and the single most valuable thing your organization can do to make measurement work for you is **hire dedicated resources**. Unfortunately, in 2008 those resources are incredibly hard to find and, in many instances, moderately expensive. According to Indeed.com, the number of open positions looking for some type of web analytics experience has increased 275% since early 2005! And research from Web Analytics Demystified highlights that the average practitioner with more than five years of experience is earning over $100,000 USD.

But the fact remains, if you're going to be serious about analysis on your web and marketing data, you have to have dedicated resources. Web Analytics Demystified recommends that you get serious about bringing someone by being thoughtful about how you advertise the position, the salary you offer, and the kind of person you're looking for. Consider recruiters and niche job boards to help you find that rare combination of analysis and presentation skills and technical understanding that you need to excel at audience measurement organizationally.

If you're not sure if you have a resource problem, ask yourself "who is responsible for making sure that we use web analytics effectively?" keeping in mind that this is a different, more tactical resource than the senior owner you assigned back in January. If the answer is "nobody" or "everybody" then you either have a problem today or will in the near future.

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august: evaluate your ability to analyze data

Far too many companies either confuse "reporting" with "analysis" or simply fail to get to the point where they can actually produce analysis. While good reporting is very important, *analysis drives action in organizations*. More importantly, most senior managers prefer analysis to raw data, and are far more likely to approve headcount, budget, and other resources to online projects when there is good analysis available to make the case with.

The best way to produce good analysis is to have:

1. Good data collection technology
2. Good data analysis applications
3. Good, smart people
4. Excellent process

While it is difficult to describe the differences between reporting and analysis, it's much like Judge Potter said, "you know it when you see it!" Good analysis is presented, not provided; good analysis makes recommendations and proposes testing plans; and good analysis is often controversial and forces the organization to make a decision.

If you're not sure if you're already producing analysis, think about your last three interactions with web analytics: we're you logging into a system or having a conversation? We're you reading canned reports, or reading a written document? And were you left with more questions than answers, or more answers than questions? If the former, you have reports, and you're likely under-utilizing your existing investment in audience measurement.

september: determine your ability to test alternatives

One thing we at Web Analytics Demystified can never emphasize enough is that **multivariate testing is fundamental to the process of "doing" web analytics**. If you're not actually testing the recommendations produced by your smart people during the analysis process, you're not really doing web analytics.

Why test?

Because you don't really know what is best for your visitors. You may have your suspicions, but at the end of the day it's not you, it's not your HiPPO (Highest Paid Person in the Organization), it's your customers who decide what works and what doesn't work. And the only smart way to figure out what works is to carefully and measurably show your customers alternatives and let them systematically answer your questions.

Thanks to recent advances in the marketplace, you can now do a surprising amount of testing with very little technical knowledge, potentially at zero cost! And testing is the only proven way to determine your overall return on investment from technology, people, and the opportunity costs associated with site changes of any kind.

Knowing whether you have a problem with your ability to test is easy: if you're not testing, you have a problem. Period. If you are testing, you need to be testing as the rule, not the exception. Yes it takes extra time, yes it takes extra effort, and yes, you need to test to develop the strong understanding of your visitors and visitor segments required to compete in a rapidly changing online environment.

FOURTH QUARTER:
CHALLENGE YOURSELF TO DO BETTER ANALYSIS

In Q4 you need to put everything you've learned throughout the year to work and then work even harder. As the year ends, Web Analytics Demystified recommends expanding your use of visitor segmentation, data integration, and then taking a thoughtful look back on how you did throughout the year.

october: extend your use of visitor segments

One of the most powerful and amazing of all capabilities of good web analytics and data analysis technologies is the ability to segment visitors. Visitor segmentation reflects the truth that there really is no "average" visitor or customer and gives analysts the ability to compare observed behaviors to expectations in the context of the site's business objectives (which you defined clearly back in February, remember?)

Broadly speaking there are three types of visitor segments that you can create:

- **Behavioral segments** allow you to differentiate visitors who exhibit particular patterns during their visit. For example, you could segment visitors who *do* and *do not* successfully complete a transaction of some kind, or create a segment of visitors who see what you believe to be a critical piece of information on your site.

- **Technographic segments** allow you to differentiate visitors based on the browser, operating system, cookie status, type of device, etc. they use to come to your site. For example, you could segment visitors coming to your site on normal computers versus mobile devices.

- **Customer segments** allow you to differentiate visitors based on qualitative and quantitative data usually stored in your customer data warehouse. For example, you could segment your highest value customers and compare them to lower value customers, prospects, and unknowns.

Visitor segmentation is often arduous depending on the type of application you're using but the benefit is almost always worth the effort. When applied back to your business objectives, activities, and key performance indicators, being able to examine the metrics for *both* your audience as a whole *and* your most valuable visitors allows senior management to make much more informed business decisions.

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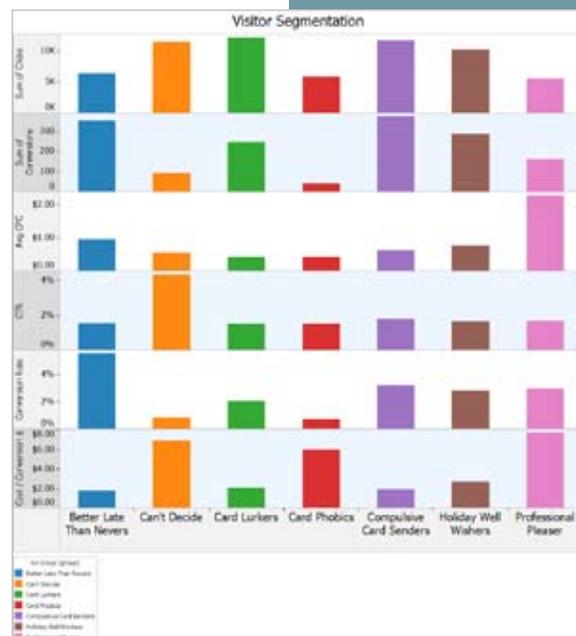
FIGURE VI: Visitor segmentation can highlight audience distinctions that lead to better decision-making.

november: expand your use of customer data

Analysts of any caliber working in web analytics eventually realize that purely quantitative click-stream data collected from their web servers and page tags doesn't provide the level of detail truly required for high quality analysis. Quantitative-only data sets do an excellent job of describing where and when problems are occurring but do little to answer questions about *why* those problems are occurring.

In response to this challenge Web Analytics Demystified has documented a suite of technologies useful for data collection, reporting, and use that we call the Web Site Optimization Ecosystem. From a measurement perspective, the Ecosystem makes use of two additional technology sets to fill in some of the missing quantitative and qualitative data that analysis need:

- **Voice of Customer** systems designed to survey your audience and ask purely qualitative questions like "why didn't you purchase?" and "are you planning to call us?"
- **Customer Experience Management** systems designed to collect application and performance-related data that frequently impacts the visitor's overall experience

The integration of these systems reduces the number of unanswerable questions, improves response times when problems occur, and drives the creation of deeper analytical insights. Readers interested in the Web Site Optimization Ecosystem are encouraged to write Web Analytics Demystified directly for more information.

If you're not sure if you need to integrate these technologies ask yourself how many times in the last six months good analysis of quantitative data has resulted eventually in someone saying "we don't know the answer to your question based on the data we have today." It is exactly those type of "we don't know" moments that the Ecosystem is designed to resolve.

december: look back and evaluate your progress

Something far too few companies do is take the time to evaluate their overall use of web analytics and audience measurement technology, basically taking a step back and asking "how well do we do this?" and "are we getting more out of our measurement efforts than we're putting into them?" But web analytics is hard and a lot can change over the course of a year:

- Your priorities can change, which may change your business objectives
- Your resources may shift, be lost, or be reallocated
- Your vendors may fail or be acquired
- You may have new sources of data
- You may deploy new technology

Web Analytics Demystified recommends sitting down as a team once a year, perhaps with your vendor or outside consultants, and asking everyone that analytics touches a few simple questions. Start with "are the measurement and analysis processes we have in place today helping you run your business?" and "what can we do better?" and we're sure you'll have a very productive conversation.

SUMMARY

There is a lot involved in being successful with web analytics, and most companies are actually surprised at how much work is required to derive the benefits described by the "web analytics is easy" crowd. But not measuring is simply not an option, and thusly marketers, site operators, and business owners all have a responsibility to establish the kinds of processes we describe in this document. Web Analytics Demystified has every confidence that you will be successful if you develop a *strategic roadmap for success* and work to improve your ability to measure and analyze your online efforts quarter over quarter, one month at a time.

ABOUT THE AUTHOR

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**, email **eric.peterson@ webanalyticsdemystified.com**, or call (503) 282-2601.

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