

Web Analytics 2.0: Empowering Customer Centricity – Part II

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ABSTRACT—In this two-part article, we started by describing the best practices of Web Analytics, the steps required to analyze a website and understand the behavior of its surfers. For this purpose we presented a Web Analytics process created by the authors based on their experience and industry’s best practices. Part I detailed each step of the process, going from defining goals and KPIs to collect, analyze, and take action using website data. Part II proposes a pioneering concept of Web Analytics or, as we call it, Web Analytics 2.0. This concept advocates a holistic approach to website analysis in which we consider several sources of knowledge: website data, multiple outcome analysis, testing, competitive analysis, and customers’ voice. The papers are especially valuable to those managing, maintaining or optimizing websites because they provide the tools to analyze and improve online customer experience and website profitability.

INTRODUCTION

We define Web Analytics 2.0 as the analysis of qualitative and quantitative data from a website and its competitors, to drive continual improvement of the online experience that customers and prospects have, which ultimately translates into the website’s desired outcomes (online and offline).

It is a new way to think about web data and new sources of data, which builds the complete picture of customer behavior in websites: in-site and off-site, online and offline, quantitative and qualitative. We will discuss the framework of all the steps of Web Analytics 2.0, five interesting ways of thinking about data in websites using qualitative and quantitative data to make holistic decisions. Following is the framework used, showing how each step uncovers a new layer of information, ultimately leading to insights that will drive an analyst to make the necessary changes to increase revenue and become a champion in the organization.

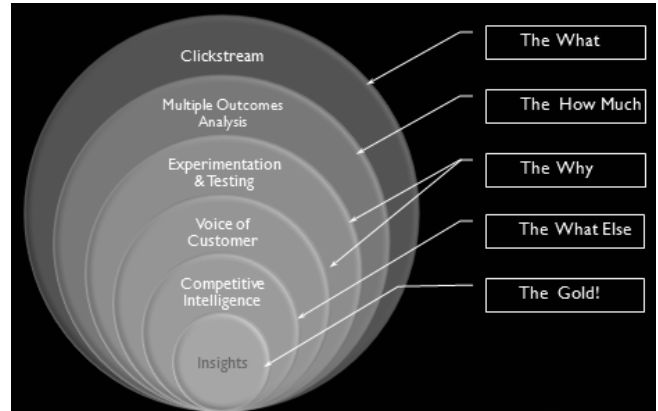


Fig. 1: Web Analytics 2.0 Framework

WEB ANALYTICS 2.0 FRAMEWORK

A . *The What: Clickstream Data*

Clickstream analysis was discussed in depth in Part I of this article. This information is collected using standard web analytics tools and uses on ‘site data about user behavior such as referrers, time on page, bounce rate and other standard metrics to analyze and improve website performance. Although it shows only part of the picture, it can be used wisely to understand customer behavior. Using some of the techniques demonstrated in Part I of this article, a web analyst can understand how a user behaves in the website, which pages are performing well, which sources of traffic are profitable, and which segments of visitors convert better, and so on.

B . *The How Much: Multiple Outcome Analysis*

This approach can be best described by the Micro vs. Macro conversion analogy. As can be seen in the following figure , **for the macro conversion the web analyst measures outcomes (say orders).** **For the micro conversions the web analyst measures secondary objectives:** page views or job applications submitted or number of clicks on “print this page” or “task completion rates by primary purpose”.



Fig. 2: Multiple outcome analysis – Micro X Macro conversions

The benefits of this approach can be summarized in a few points, it:

- Helps focus on more than just the main reason the ‘site was created for.
- Helps measure multi-channel impact, well beyond the website.
- Forces the analyst to understand the multiple personas on the website. It encourages segmentation of visitors and visits and behavior and outcomes
- Helps realize the limits of a pure clickstream strategy.

Following we provide two examples in which we have applied this idea of multiple outcomes.

I. Photo publishing and sharing website

When www.fotonatura.org, a Spanish photo-sharing website, wants to track success it measures conversion rate:

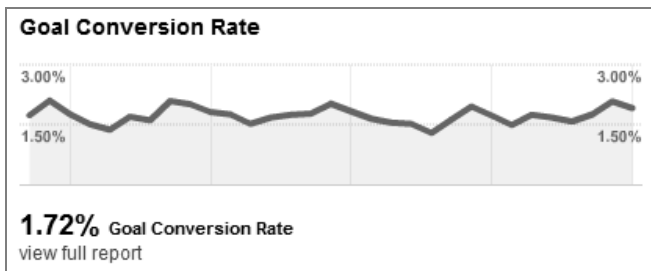


Fig. 3: Measuring ecommerce macro-conversions

But the analyst is also measuring micro-conversions, metrics that his ‘site is trying to improve that mean success for him:



Figure 4: Measuring ecommerce micro-conversions

The micro-conversions are:

- Registrations on the ‘site
- People/Members publishing photos (core for growth)
- People who sign up for premium content
- People who sign up for newsletters/announcements (good for future customers).

These micro-conversions show a complete picture measuring all types of behavior and all elements of success. The 1.72% conversion won’t go up high, but the ‘site’s success is bigger than just that one number.

II. Social Media Metrics/Blog Success:

Social media ‘sites are complicated because many traditional analytics tools and analysts’ mindsets fail at identifying what to measure and how to capture the data. Below we focus on measuring blog success, based on the metrics used for Occam’s Razor (www.kaushik.net/avinash). The macro-conversion we recommend for blogs is RSS subscribers, or more specifically, the growth of RSS subscribers. **The hardest thing to do in an attention economy is to get permission to push content, RSS represents that permission.**

Following is an example of tracking RSS subscription using FeedBurner:

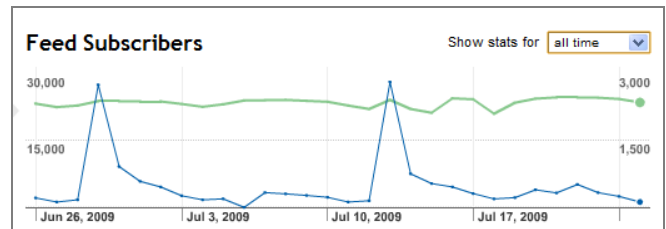


Fig. 5: Measuring social media – macro-conversions

When it comes to micro-conversions metrics get more interesting:

1. Below we can see the number of clicks on the book’s link to Amazon, this is a micro-conversion because clicks on this link may lead visitors to buy a book (table extracted using ClickTracks).

	All visitors	Micro Converted
Jul 2007	22408	629
Aug 2007	26786	736
Sep 2007	23098	688
Oct 2007	36689	956
Nov 2007	33565	851
Dec 2007	26830	591
Jan 2008	37229	786
Feb 2008	56184	1343
Mar 2008	34022	793

Fig. 6: Measuring social media micro-conversions

2. The number of user comments per post, trended over time is also a micro-conversion. It represents the success at engaging visitors with your unique content and getting them to contribute their thoughts, i.e. in the most social of social environments your ability to create meaningful conversation.
3. The number of unique blogs that link to your blog (with links expiring in six months to ensure you keep creating content that causes a “ripple”). Technorati can be used to measure this.

Another interesting fact regarding the preceding example of blog measurement is something to apply to measurement of any type of website: **sometimes it is important to go beyond the tools being used, and other times it is necessary to create new metrics to measure micro-conversions.**

C. The Why

I. Experimentation and Testing

As Albert Einstein said, “Anyone who has never made a mistake has never tried anything new.” **The web analyst must try endlessly and learn to be wrong quickly, learn to test everything and understand that the customer should choose, not the designer or the website manager.** Experimenting and testing empowers an idea democracy, meaning that ideas can be created by anyone in the organization, and the customers (the market) will choose the best one; the winner is scientifically clear.

The web analyst’s job is to define how to create, design and implement the idea democracy. **The most interesting outcome about experimenting is not the final result; it is the learning experience about the customer.** The web analyst, designer and website manager will understand from the source what the ‘site should look like, what the customers want. Using statistical techniques one can determine whether changes on the website have improved the conversion rate or not.

It is critical to understand that testing is not limited to landing pages or campaigns. It should be implemented across the website, wherever visitors are abandoning the website and wherever the website is leaving money on the table. We recommend the following to starting and advanced web analysts:

1. **Start with a radical A/B test:** it shows the value of testing faster because the analyst will get a significant change faster. It will bring the emotional change required to embrace testing across the organization.
2. **Test a Single Page vs. Multi-Page Checkout:** one of the best ways to improve conversion is to reduce Cart and Checkout Abandonment rates. Some websites have a one-page checkout process: shipping, billing, review and submit. Other websites have it on four pages. From our experience, both can work; it really depends on the population visiting the website. So if the ‘site has a single page, why not try the multi-

page? Or vice versa? In both scenarios this might prove valuable by touching a high impact area.

3. **Optimize the Number of Ads and Layout of Ads:** for ‘sites serving advertisements, we recommend testing the number of ads on a page. We have seen a test in which a client reduced the number of ads on the page by 25%, and the outcomes improved by 40%.
4. **Test Different Prices/Selling Tactics:** following is a case that best explains this technique.

A company was selling four products, but the environment got tough so the competitors got competitive. How to fight back? Some “genius” in the company had an idea, “Why don’t we give our cheapest product, currently valued at \$15, away for free?”

This idea certainly presented a fundamental challenge: no one likes to give up revenue. And employees worried about how successful it would be, what would be the revenue impact? and why would anyone buy a non-free version? Rather than create prediction models or giving up in the face of pressure, the analytics team launched an A/B test. And they controlled for risk by doing a 95% control and 5% version A test.

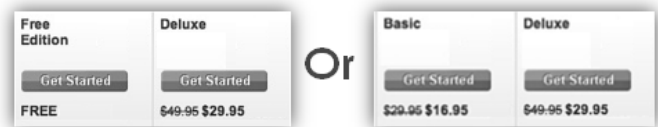


Fig. 7: Testing different prices or selling tactics

Perhaps unsurprisingly the free version of the product sold many copies. What was surprising was that the free version helped shift the SKU mix in a statistically significant way, i.e. the presence of free product caused more people to buy the more expensive options. The other positive side effect was that it brought many new customers to the franchise, as they “purchased” the free version.

II. Voice of Customer

As the web evolves, and customers take up the reins of it, marketers must find creative solutions to engage customers with their websites/brands. As Tapscott and Williams described in *Wikinomics: How Mass Collaboration Changes Everything* [3], we have entered the era of prosumption. Today, customers are no longer satisfied with consumption; they increasingly expect to be involved in the production of what they buy, turning them into prosumers.

When a customer comes to a website, s/he is probably looking for something: to buy a product, to gather information, to have fun, and so on. By analyzing clickstream data it is hard (if possible at all) to understand whether the visitor found whatever s/he was looking for and how fruitful was the website experience. **The most productive way to understand the customers is to give them a voice, ask them.**

Today, it is possible to do simple online surveys and get important customer feedback on the website's performance; 4Q Online Surveys (www.4qsurvey.com) provide such a platform for free. The organization will learn what brings customers to the website, and how/if the company is delivering it. 4Q proposes a four- question survey that should be asked of every customer (or a % of them) coming to a website:

- What are my visitors at my website to do?
- Are they completing what they set out to do?
- If not, why not?
- How satisfied are my visitors?

If the web analyst wants to identify how best to improve the website's pages using 'site-level feedback, there is also a free option for that, Kampyle (www.kampyle.com), a company that provides feedback analytics

Customers telling you what you should be doing is the first step (and the best way) to improve customer satisfaction and, consequently, website performance.

D. The What Else: Competitive Intelligence

One of the web's greatest advantages is that it throws data everywhere; it is possible to find almost any data about almost anything. Free online competitive analysis websites like Google Trends for Websites, Compete.com, Quantcast.com, and Google Insights for Search provide data regarding a website's number of visitors, the average time people stay on the website, the velocity of growth and many other metrics. Paid services like Hitwise provide in-depth information regarding sources of traffic, search engine keywords share, demographics of visitors and other metrics about virtually every website on the Internet.

The web analyst should understand the ecosystem and compare his/her website performance to the competitors'. This information provides context to clickstream data; if all the industry improved by 50% and your website improved by 20%, your performance might have been overestimated. In addition, it may show the referrers/keywords your competitor is getting valuable customers from; this will help when planning online banner campaigns, PPC campaigns and in defining the SEO target keywords. It may also show the demographic and geographic characteristics of visitors to your competitors as compared to your users; this will be highly valuable to help understand the differences between your audience and your competitors'.

An analogy is that of a boat in the middle of the sea. You can be a highly effective boat on the sea, with every engine working perfectly and food for months. However, if you don't have meteorological (competitive) data, you might be taken by surprise when a tsunami reaches you, making it impossible to escape on time and in the right direction.

As Bill Tancer [2] puts it:

In a world where market leadership can be upended in a matter of days, how can any company operate blind to the competition around them?

THE GOLD: INSIGHTS

After applying all the preceding techniques, the web analyst will be rewarded with the most valuable prize in the web and outside it: insights. They are the golden reward for all the hard work. Insights enable clear ways to improve the website and increase the profitability of marketing efforts. To quote Ralph Waldo Emerson:

Give me insight into today and you may have the antique and future worlds.

The big challenge for crossing any chasm, like this one, is not technology or tools or other related items: it is mindset, entrenched mindsets. The challenge is to evolve our mindset to think 2.0. The mindset evolution that is absolutely required to move an organization to Web Analytics 2.0 can be described in one paragraph:

In the world of Web Analytics 2.0 clicks don't rule, rather it is the combination of "head and the heart" where web analysts care just as much about what is happening on their websites as they do about the competitor's, all the while automating as much decision making as possible to eliminate reporting and to some extent analysis. The world is one of continuous actions (surveys, testing, behavior targeting, keyword optimization...) and continuous improvements where customers rule and not the Highest Paid Person Opinions (HiPPO).

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AUTHORS



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Avinash Kaushik is the author of *Web Analytics: An Hour A Day* and the Analytics Evangelist for Google. As a thought leader Avinash puts a common sense framework around the often frenetic world of web research and analytics, and combines that with his philosophy that investing in talented analysts is the key to long-term success. He is also a staunch advocate of listening to the consumer, and is committed to

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