

Introduction to The Guide to Web Analytics

How to Understand and Use Your Web Trends to Maximize Results

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Foreword

In May of 2000, Future Now, Inc. added a new feature to their Web site: a free, downloadable calculator suite. Presented as an Excel Spreadsheet, this unique application allowed users to enter 8 numbers related to their Web site's commercial and visitor activity, and generate calculations for 10 conversion metrics.

Since then, thousands of individuals have downloaded the Future Now Digital Sales Calculator, and the application has grown to include 22 metrics that can give both commerce and content companies the kind of hard information they need to make informed business decisions in an online environment.

But even as the ability to secure actionable information has developed, so has the confusion. Server logs are capable of capturing overwhelming amounts of data - how is one to know just what to do with which piece of data? Our work with clients routinely reveals they are very good at collecting data, but terribly uncertain what sort of useful information they can extract from all those numbers.

The growing need for explanations presented in plain-spoken language prompted us to create *The Guide to Web Analytics: How to Understand and Use Your Web Trends to Maximize Results*, the perfect companion to our Calculator and your Web analytic software.

Jeffrey Eisenberg
CEO, Future Now, Inc.

Haven't got the Future Now Digital Sales Calculator?
Download it free from FutureNowInc.com

Web by Numbers

The new field of "e-metrics" is injecting the kind of statistical precision into the Internet that is enjoyed by bricks-and-mortar companies, reports John E. Shreeve

This article about the Future Now Digital Sales Calculator was first published in the UK business newspaper, EDP Business, and later in various other magazines and on the web.

PEOPLE DOING BUSINESS on the web are frontiers' people, carving out new territories and expanding into new vistas of commerce undreamt of before. It's an exciting time for anyone in e-business. But it's also risky. Online companies don't have the level of certainty enjoyed by bricks-and-mortar companies.

Judging by the CEOs and managers I've spoken to in my work as a journalist it's clear that they'd all dearly love to have some hard figures on which to base their decisions and strategies.

With this in mind, I started asking around to find out if anyone was offering ways to bring a degree of certainty to e-business. Eventually I came across Future Now, a US company specializing in marketing strategies and the new field of "e-metrics."

One of the company's principals, Bryan Eisenberg, along with independent marketing consultant, Jim Novo, had devised a "Digital Sales Calculator" that analyzes the data from web analytic software like WebTrends™ and turns it into information you can act on with confidence. What's more, the Calculator was free to download from the Future Now Web site.

I realized that this was exactly what a lot of CEOs and managers I'd come across needed. Some of them complained that they

had a low "conversion rate" - visitors to their web sites just weren't turning into buyers in the numbers needed to make a healthy profit. But they had no precise idea why this was. Maybe something was wrong with the online sales process? Or maybe it was just one step in that process that was wrong? But which step? They couldn't tell.

Web analytics

In truth, however, they did have a way to tell. The information was there in the reports delivered by their web analytic software. Web analytic software takes the raw data from web site server logs and turns it into reports that tell you how well or poorly things are going. The only problem is, expensive though the various brands of web analytic software are, the reports they generate need organizing so that:

- ♦ Intelligent strategies can be developed to help keep web site visitors on track in the sales process
- ♦ The results of those strategies can be accurately measured to assess their effectiveness

And this is exactly what the Future Now Digital Sales Calculator does. It takes the data from web site reports and turns it into "actionable" metrics, or statistics, that can be tracked over time, which makes it a valuable tool for any online company - large or small.

"All metrics created by the Digital Sales Calculator tell you specific things about the way your visitors are behaving, and you can literally take action based on the metrics and track the changes in visitor behavior your action caused," explains Bryan Eisenberg. "These aren't 'Gee, that's interesting' metrics like browser share, IP addresses, and page views. They are the ones that have dramatic impact on the profitability of your web

site. By tracking these metrics and trying to affect them, you can get your web site a lot closer to the goals you are trying to achieve - and that applies to both sales and content sites."

He goes on to explain that the metrics and reports generated by the Calculator clearly say: "Fix this and your visitors will view more pages (if you are a content site); or fix this and you will sell more product (if you are a commerce site)."

Click rate

One common element that often needs fixing on e-commerce web sites is the number of clicks it takes a potential customer to make a purchase. "Obviously, the fewer clicks the better," says Mr. Eisenberg. "Why do you think Amazon.com fights so hard to protect its 1-Click Checkout patent? It realizes that one of the main causes of incomplete purchases and abandoned shopping carts is the long and tedious checkout process many e-tailers inflict on their potential customers."

One of the key strengths of Future Now's Digital Sales Calculator is it shows precisely where a potential customer left your web site before completing a purchase. If a lot of prospects drop out of the sales process at a given point, then it is clear that something is wrong on that particular page. It might be that the copy doesn't make it clear what the potential customer should do next (Mr. Eisenberg says every page on a web site should focus on getting the visitor to take an action, even if that action is simply to move on to the next step in the process). Or there might be a shortcoming with the design of a page - the layout and various navigational buttons, for instance, could be causing confusion.

Whatever proves to be the case, the important thing is action can be taken based on the information provided by the Digital

Sales Calculator. Not only that, but the action you take can be measured to see whether it was effective. If it wasn't then it is a question of keep trying until you succeed.

But without solid, informative statistics a webmaster is foraging around in the dark, hoping that this or that strategy will work, but never being able to prove its efficacy one way or the other.

Numbers game

Mr. Eisenberg makes no bones about it: "E-commerce is a numbers game. The trick is to focus on the right numbers so that you can make accurate decisions about how to improve your web site and, ultimately, your CCR [customer conversion rate]. My experience has been that few online companies are collecting the right data, or they're so overwhelmed by data that they don't know what to do with it."

Because Mr. Eisenberg's Calculator, and the new field of e-metrics, injects the kind of statistical precision into the Internet that is enjoyed by bricks-and-mortar businesses, it looks set to become something of a milestone in the world of e-commerce. A lot of companies have downloaded the Calculator from the Future Now web site and, for many, it has become integral to their online operations.

As Mr. Eisenberg says, "Without e-metrics, the web continues to be a grand experiment, a government research project that escaped the lab, mutated, and took over the world. But with e-metrics you have the opportunity to approach the web from an objective, systematic perspective. You can move from trial and error to trial, measure, and improve."

John E. Shreeve

The Metric That Matters

According to customer metrics consultant, Jim Novo, improving your conversion rate boils down to a few simple rules of thumb, yet few web site owners follow them...

WHEN IT COMES to online business, the metric that matters is the conversion rate. Other metrics matter too, but they combine together to make up the conversion rate. The conversion rate measures the number of visitors who log on to a site within a given period divided into the number of visitors who take action there -- make a purchase or register, for example.

The average conversion rates for Web sites are in the 3% to 5% range. Below 2% is considered poor, while 10% and above is awesome. I asked Jim Novo, co-creator of the Future Now Digital Sales Calculator, for his thoughts on online conversion rates. Excerpts from our conversation follow.

JOHN SHREEVE: If successful Web sites share a formula for getting high conversion rates?

JIM NOVO: Successful Web sites do have a lot in common. But there's no magic formula. The key thing is a site must be easy-to-use. Confusing, difficult-to-navigate sites, have terrible conversion rates. If your site needs a how-to manual, users will give up and you'll nose dive. Web sites also need to load fast. These are the basics, and I think people are pretty much aware of these issues.

What is less obvious is this: how does a site owner or designer really know when they are making the site easier to use? There are lots of places in a site where conversion can fail, and you

need a standard set of metrics to track over time so you can see if changes improve the situation or make it worse - at each level of conversion. If you can't track something, you can't manage it. The metrics provide a "final word" - no matter how much you like the new design, if the metrics crater, you are not doing the right thing for the user. I think people will be using metrics a lot this year as "final proof" to resolve disagreements between the various stakeholders in a site regarding design and product issues.

JOHN: There are a lot of Web sites that make it difficult to buy -- why do you think that is?

JIM: It's not intentional. You just have a lot of players involved - IT, marketing, design - who don't really understand customer behavior or how to measure it. And there has been no yardstick people can use to measure success or failure. The calculator is a start.

I also think people don't understand "traffic" very well. You can have the best design and a sell-through process around, but if you don't get the right traffic, it doesn't matter. The fact is, getting the right traffic in the first place is fundamental to high conversion rates. But you want to address traffic quality after you tune the site for highest conversion. Otherwise, you are just wasting your time with the traffic quality issue, because you won't be able to convert them. We'll be putting out a report on traffic quality and how to use WebTrends™ to track it in the near future.

JOHN: What level of impact do you think the Digital Sales Calculator is having on Internet business?

JIM: As more and more people download the Calculator and use it, a definite standard is evolving. People are testing what works

and what doesn't, so they're no longer operating in the dark. And the things they are learning are beginning to spread around the Web. In fact we've set off a spontaneous viral marketing current -- almost without trying. Which is good for us. But it's also good that e- businesses are improving their sites and the way they relate to their customers. After all, making life easier for Web site visitors means higher conversion rates and increased profits. Operating with clear vision -- which is what the Digital Sales Calculator provides -- means you are able to spot exactly where your online operation is falling down. You can then do something about it. Having that clear vision is the key.

John E. Shreeve

Where To Get

The Guide to Web Analytics: How to Understand and Use Your Web Trends To Maximize Results



Price: \$99

**For a limited time, receive 10% off
Available only at HiqHq
www.hiqhq.com/webtrends.asp**

Do you want to get a better understanding of what your visitors are doing on your Web site? Do you want to increase the number of pages visitors view, subscriptions, reader loyalty and the amount of time visitors spend on your Web site? Do you want to increase your online sales, reduce your cost of customer acquisition, increase your customer retention rate, and increase your average order size?

Demystifying the Raw Data in Your Server Logs

Buried in your server logs are the keys to unlock the potential of your business. This data needs to be turned into action-oriented information co-workers can use to improve the business. When you standardize and implement these powerful analytic tools that include the most important, easy-to-understand metrics, you ensure everybody has the tools they need to succeed.

Take control of your Web site by tracking metrics that matter and use them as proof-of-concept for any changes you need to make

to design, copy, or navigation. Continuous, incremental business improvement and return on investment ("ROI") can only be achieved when you track the metrics that really matter.

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Usability Metrics: Navigation / Page Layout / Clicks to Buy

No Sale Rate: Home Page

Formula:
No Sale Rate: Home Page = (# of 1-Page Visits to Home Page) /
(# Of Visitors Entering Site through Home Page)

What is it? This is the percent of Visitors who requested the Home page and then left from the site.	How to calculate it: Divide the number of One Page Visits to the Home Page over a period of time by the number Of Visitors Entering the Site through the Home Page over the same period of time.
	Example: 3,654 1-Page Visits to Home Page in past week 18,378 Visitors entering the site through Home Page in past week $3,654 / 18,378 = 19.9\%$ No Sale Rate for Home Page

Your calculations:

How to use it:
This metric is the king of the current metrics described here; if you have time to track only one thing, track this one (assuming your home page is the top entry page.) If you have other high volume entry pages, they should be tracked instead of or in addition to the Home page. For any site you can imagine, if visitors are not making it past the home page or other high volume entry page, something is wrong. If the marketing is on target, the problem centers on usability - visitors simply cannot find what they want to find, or the design (including the way offers are presented, the speed of page load, the copy in text links) is simply not working. If the site design is a usable one, and the call to action easy to find, then the problem is traffic quality - a marketing issue. This metric is especially effective for hunting down copy problems on a specific page. Unquestionably, lowering the No Sales Rate for the Home Page is a good thing.

WORKBOOK

*Sample page from the workbook included in
The Guide to Web Analytics*

Web analytic software takes raw data and turns it into structured information in the form of reports. But we only gain the knowledge that allows us to take action when we understand the inter-relationships of the data. This guide, a collaborative effort between Bryan Eisenberg of Future Now, Inc. and strategic partner, Jim Novo, former VP of Marketing and Programming at Home Shopping Network, explains how you can turn that raw data into useful metrics that will provide a baseline and help you track and improve your online efforts.

Prepare for Clarity and Comprehension

In this step-by-step 76-page report you will:

- ♦ Learn how to measure the success of your online presence;
- ♦ Learn why conversion rate marketing demands measuring, testing and optimizing;
- ♦ Track your trends with the free MS Excel calculator spreadsheet;
- ♦ Get a clear understanding of Web metrics;
- ♦ Learn how to establish benchmarks for your Web metrics;
- ♦ Learn where to find the data you need to manage your online business;
- ♦ Learn how to turn the raw data from your Web logs into actionable information;
- ♦ Get a better handle on the performance of your eCommerce initiatives;
- ♦ Learn how to use metrics to manage your Web content;
- ♦ Manage your Web site to increase conversions;
- ♦ Use the 21-page workbook to focus on your own Web site.

Every page includes:

- ♦ A formula to figure out your own metrics;
- ♦ An explanation of what the metric means;
- ♦ A clear guide on how to calculate your metric;
- ♦ An example of that metric;
- ♦ Space to calculate your own metric;
- ♦ A concise explanation of how to understand and use the information;
- ♦ Learn how Web metrics are related to financial statements;
- ♦ And much more!

With a common-sense approach, *The Guide to Web Analytics* helps you make sense of your Web logs and allows you to access the powerful information they contain - information that will give you the hard facts you need to make informed decisions about the effectiveness of your conversion process.

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About the Authors

Workbook Metrics Featured in The Guide to Web Analytics

Content Metrics:

Targeting Audience / Content Match

- Take Rates: Newsletter, Bookmarks, Downloads
- Repeat Visitor Share
- Heavy User Share
- Committed Visitor Share
- Committed Visitor Index
- Committed Visitor Volume

Usability Metrics:

Navigation / Page Layout / Clicks to Buy

- Visitor Engagement Index
- No Sale Rate: Home Page
- No Sale Rate: All Pages
- Scanning Visitor Share
- Scanning Visitor Index
- Scanning Visitor Volume

Macro-Action Metrics (e-Commerce):

Top-Down

- Average Order Size (AOS)
- Customer Conversion Rate (CCR)
- Sales Per Visitor (SPV)
- Customer Acquisition Cost (CAC)
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- Site Penetration Index (SPI)

Data to Collect

The Content Data You Need

From the "General Statistics" Section in a WebTrends™ Report

Page Views: Document Views

Depending on how you have set Log Analyzer up, a Document View is usually the "cleanest" number you can use. When I do research on improving conversion or visitor quality, I want to know about page views -- not form views, script runs, or anything else. If you want to know about those things, track them separately. See more on this issue under "Set-Up" below.

Visitor Sessions: Visitor Sessions

For understanding individual visits to your site. You can define the length of what is considered a session by going to Configure > Options > General. The default (and pretty standard) is 30 minutes -- though this is really an arbitrary convention. If you have reason to believe your site visitors behave very differently from the average, try running a few profiles using different session lengths and look at how the numbers change. Once you pick a session length, stick with it, or you won't be able to compare your stats with past behavior you have tracked.

Of course the lower the total traffic your site receives the longer the session length required for meaningful statistics. That is why we suggest the standard 30 minutes session length so that when your traffic does improve you'll have a standard benchmark to refer to.

Visitors: Unique Visitors

For understanding how many unique individuals who come to the site. If you have cookies enabled for tracking, you can set

WebTrends™ to recognize the cookie and use it to determine Unique Visitors. Go to Configure > Options > Cookies.

Otherwise, every person coming from the same IP address (like AOL users, for example) will be counted as one Visitor. If you don't have cookies set up to identify users then don't sweat it -- as long as you use the same stat generated in the same way over time, you will still be able to recognize important trends.

Visitors: Visitors Who Visited More than Once

This is repeat visitors, and is as accurate as Unique Visitors. If you are not identifying uniques with cookies, you won't get an accurate repeat number for the same reasons as mentioned under Unique Visitors above. Again, not a problem, as long as you stick to the same method of measuring it each time.

Top Entry Pages - Home Page

Assuming your Home Page is the top entry page, you want to know how many visitors enter the site through this page. "Enter" means this is the first page they see on their Visit. If you have other high volume entry pages, these should be tracked instead of or in addition to the Home Page. This metric is used in conjunction with the one below, so if you track pages for Entry, they should also be tracked for Single Access.

Single Access Pages - Home Page

Again, assuming the Home Page is the Top Entry Page, this tells you how many people looked at this page first and then looked at no other pages. If you have other high volume entry pages, you should track the Single Access metric for them.

From the "Advertising Section" in a WebTrends™ Report

Views and Clicks: Newsletter, BookMarks, Downloads

You can track anything that creates a log file entry, like scripts, single pixel .gifs, etc. This is set up under Configure Ad Views and Clicks. See more info in Set-Up below.

From the "Activity Statistics" Section in a WebTrends™ Report

By Length of Visit

In the top Line: 0-1 Minute Visits - visits of under 1 minute in Length

Also in the top Line: 0-1 Minute Page Views - page views occurring in visits of under 1 minute in Length

In the bottom line: >19 Minute Visits - visits over 19 minutes long.

Also in the bottom Line: >19 Minute Page Views - page views occurring in visits of over 19 minutes in Length.

Note: Your version of WebTrends™ may use >20 Minute Visits / Page Views or some other "maximum" in this table. Go right ahead and use whatever definition they provide. Remember, it's not the absolute number that is important, but changes in a number. There is nothing magic about a 19-minute visit as opposed to a 20-minute visit. In fact, if you notice a considerable difference in such calculations, your traffic volume is much too low to be deriving any conclusion from such statistics.

By Number Of Views

Note: If the line "0 Pages" has anything other than a 0 under number of views, WebTrends™ is not set up correctly to use

these metrics "Clean" as suggested. See more on setting up a "Clean" profile in Set-Up below.

Number of Pages Viewed: 1 Page -- how many visits were to one page only, regardless of how long the visit was.

Number of Pages Viewed: 11 or More Pages -- how many visits were to 11 or more pages, regardless of how long the visit was.

The Commerce Data You Need

This data is needed in addition to the Content data above to fully create the Commerce Metrics.

Total Orders

Number of orders received

Order Size

Amount Spent on each Order

Number of New Customer orders

Orders received from new customers only

Number of Repeat Customer Orders

Number of orders from former customers

Total Sales

All Sales. In some cases, you might want to look at Net Sales (Sales minus Returns)

Marketing Expenses

Total Expenditures on a campaign or for a period of time

About the Authors

Bryan Eisenberg

One of the principals and CIO of Future Now, Inc., Bryan is an expert at bridging the gap between technology and the real world. He has been helping companies realize that to maximize results it is essential to incorporate expert persuasion techniques into Web site design, email marketing, development and implementation. He is the author of Future Now's award-winning newsletter GrokDotCom, is the author of the weekly ClickZ column "Converting Web Site Traffic", has been a featured speaker at numerous e-business events both in the United States and over seas. The application of his vision and processes have helped Future Now clients increase their conversion rates not just by percents but by multiples.

In addition to his background in both e-commerce and in technology, Bryan also has proven expertise in e-commerce customer service and support solutions as well as consumer psychology, education and motivation. His eclectic background also includes thought leadership in the critical area of Web site branding and positioning and membership in the Usability Professionals' Association. A successful entrepreneur in his own right, he also has consulted to and run seminars for numerous corporations, large and small, both on-line and in the real world. He holds a B.A. from Brooklyn College, CUNY, and did graduate work at The Wurzweiler School. Bryan is also an adjunct professor of Roy H. William's Wizard Academy and is a contributing author of Accidental Magic.

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Jim Novo

Jim is an independent consultant and works with Future Now as a strategic partner offering Data-Driven Marketing advice to clients. Jim was VP of Marketing and Programming at Home Shopping Network before starting his own consultancy in 1997. Jim has shared his expertise on interactive consumer behavior with such companies as Cellular One, MBNA, SteelTorch Software, Retek Direct, CBS Sportsline, Kobie Marketing, Aerial, Tupperware, Barnes & Noble, and Comcast Corporation.

The average ROI of customer marketing programs Jim has designed for clients now stands at just over 70%. Several clients have consistently achieved ROI of over 400% on the initiatives he developed for them. The information on his Web site about customer behavior modeling and designing High ROI Marketing campaigns is required reading for several collegiate e-commerce courses. Jim is an MBA graduate of Babson College and majored in Economics and Psychology at Dartmouth College. Jim is the author of the book: "Drilling Down: Turning Customer Data into Profits with a Spreadsheet".

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John E. Shreeve

John is a UK-based freelance journalist and editor. His articles have appeared in a wide range of newspapers and magazines, including the Financial Times, Guardian, and the X Factor. He writes a popular Web-related column for The Business newspaper (published in eastern England) and is editor of DCLnews, newsletter of Data Conversion Laboratory, a leading US technology company.

He got involved with Future Now after writing an article about them. "I was impressed by them because they were one of the few companies offering ways to turn Web site stats into hard figures you can use. The Web is a new frontier, but these guys are at the forefront of making it a less risky place for e-business," he says.

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