

# Mobile Analytics

## Actionable and Accurate Analytics on the Mobile Internet

A Mobile Visions, Inc Whitepaper

*November, 2008*

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## Introduction

According to a May, 2008 Nielsen Mobile report<sup>1</sup>, there are over 40 million active mobile internet users in the U.S. alone with unique monthly users increasing 73% from May, 2006 to May, 2008. The percentage of smartphones sold in the third quarter of 2008 increased from 4 percent to 11 percent over the third quarter of 2007<sup>2</sup>.

With some mobile websites attracting a reach as large as major cable networks, newspapers and magazines, Nielsen is expecting a chain reaction as more companies add a mobile presence.

The extremely successful launch of the Apple iPhone has raised the bar, and the other handset manufacturers have risen to the challenge. With the recent release of the first Android based phone from T-Mobile, there is little doubt that the mobile web has been given the fuel it needs to truly become a mainstream consumer media outlet.

What has become increasingly obvious as mobile Internet usage increases is that there is a need for the tracking and accountability we take for granted on the “wired” web. As companies begin to explore the mobile web, and advertisers consider adding dollars to their budgets, the need for accurate analytics becomes a top priority.

Unfortunately they quickly find out that their traditional web analytics tools don't work correctly, and the reports are misleading. The purpose of this whitepaper is to help you understand why traditional web analytics won't work on the mobile Internet, and to arm you with the information you need to properly evaluate solutions.

The information contained in this document will be useful for both companies that want to track visitors to mobile specific web sites, and companies that want to track mobile visitors to Internet sites.

## How do websites collect visitor data?

Sebastian Wenzel's Web Analytics Book blog<sup>3</sup> lists over 200 different web analytics solutions that are available today.

With over 200 choices available, why can't we just choose one and start printing out our reports? Why not use the same analytics we use on our Internet web site? Simple answer -- because those reports would be wrong!

To understand why that is, and why mobile is different, we first need a quick understanding of how website visitor information is collected, stored and analyzed.

### **In the beginning, there were log files...**

Each time you visit a web site, the server writes detailed information to a file. Since log files reside on the server, they are capable of tracking web pages, as well as other files that are transferred such as PDFs, images, downloads, audio, and video.

Log files are used mostly by web analytics software that is installed at a company's location on their servers. The analytics software loads the log files into a database, parses the data, and produces the desired reports.

### Then there was page tagging...

Web analytic service providers soon realized that they could take a huge burden off their customers by providing “hosted” reporting software. Companies would simply log in to the service provider’s web site, and view their reports quickly and easily. No log files, no data storage, and no software upgrades.

But how does my web site’s visitor data get on my service provider’s server? This is done through simple page tagging.

```
<script type="text/javascript">
var gaJsHost = (("https:" == document.location.protocol) ?
"https://ssl." : "http://www.");
document.write(unescape("%3Cscript src='" + gaJsHost + "google-
analytics.com/ga.js' type='text/javascript'%3E%3C/script%3E"));
</script>

<script type="text/javascript">
var pageTracker = _gat._getTracker("UA-xxxxxx-x");
pageTracker._trackPageview();
</script>
```

### Google Analytics Page Tag

A page tag is a snippet of JavaScript code that is put on each page of the company’s website. This snippet of code runs each time a visitor views a web page, collects information from the browser, and transmits it to service provider’s servers.

It also transmits a “cookie” to the visitor’s web browser. A cookie is tiny file stored on the visitor’s computer that identifies that visitor when they come back to the site at another time. Each unique visitor is given a unique id upon their first visit that is stored in the cookie for a specified length of time.

One additional advantage (or disadvantage) of page tagging over log files is that automated crawlers and robots do not run JavaScript. We’ll be discussing why this is important as we get deeper into mobile solutions.

Buy what happens if the browser doesn’t support JavaScript, or if the user has turned it off?

Some of the products include an invisible single pixel image that is loaded in the browser. When this file is loaded, some of the items captured by JavaScript tags can be logged. Since such a small percentage of visitors and browsers don’t have JavaScript, this is not a significant problem on the “wired” web. Over 95% of all visitors use one of the top 5 browsers, and they all support JavaScript page tagging.

## Why Web Analytics Won’t Work for Mobile

So why won’t either of these solutions work with mobile? What makes mobile so different? Unfortunately there are a number of issues that make the data either wrong, or lacking the needed detail.

### Thousands of Web Browsers

While most of the Internet traffic comes from the top 5 Internet web browsers, there are literally thousands of different mobile phone models worldwide. Each of these phones has a unique combination of characteristics such as screen size, colors, memory, keyboard, etc. Each of these phones might support different audio, video, and image types.

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With so many different browsers and technologies, how can we be sure to count every page view to our mobile site? We need to find a tracking solution that is supported by just about every phone on the market.

### Lack of JavaScript

At this time, most of the mobile phones accessing the Internet either do not support JavaScript, or only support a small sub-set of the commands. Since all of the hosted web analytics solutions use JavaScript page tags, this presents a significant problem. While the ones that include the invisible image pixel will capture some information, the others will capture nothing. Those visits will go completely unreported.

Testing we have done by putting both the Google Analytics code and Mobilytics code on the same site shows Google reporting only 35% of the traffic. The rest was completely lost!

There is simply no way for you to know how many mobile visitors are accessing your regular Internet web site if you are using JavaScript page tags. You're probably getting more visitors than you know about. And those visitors are not getting mobile specific pages that are made for the mobile phone browser.

Unfortunately on the flip side, companies build mobile sites and implement traditional web analytics as well. When they view the reports, they are seeing much less traffic than they have, and use inaccurate information to make important business decisions.

### No Cookies & Shared Carrier Gateways

When visitors come to your site, they have an Internet IP address associated with them (like a telephone number). In the early days of the web, this address could be used to identify a single user as they went through the site. Unfortunately, like a telephone number, the IP address only tells you the house and not the person. Additionally, Internet Service Providers and companies like AOL began to use servers that both shared IP addresses, and alternated them within the same user session.

A visitor could visit 5 pages on your site, and have 5 different IPs associated with them. You could also get two visitors that would show up with the same IP address. Because of this, cookies became the only real way to identify unique visitors.

Since most mobile phones access the Internet through their wireless carrier's Internet gateway, we find ourselves back where we started. While we can use the IP address to identify the country and the wireless carrier, we can't rely on it for a unique identifier.

To make matters worse, most of the phones being used today do not support cookies. In some cases the phone might support cookies, but the carrier's gateway strips it out. So if you have visitors with the same phone on different carriers, one might support cookies and the other not.

So we need a way to know if someone comes back to our site if we can't put a cookie on their phone. We need to separate two visitors who use the same phone type, from the same carrier.

### No Tracking of Crawlers & Bots

When using log file based analytics on your wired Internet site, one of the things you quickly see is how much traffic is coming from bots and crawlers. Just the GoogleBot and the Yahoo Slurp alone will totally skew your page view, and visitor counts.

While it's true that you usually don't want to know about these visits, there is good reason to know this information on your mobile web site.

Many companies purchase banner, and pay-per-click ads to drive traffic to their sites. Each time one of these ads is clicked on by someone, they are sent to your site, and you are charged.

On the Internet, these ads are displayed using JavaScript tags similar to analytics tags. Since bots and crawlers do not usually execute JavaScript, the ads are not clicked on.

Since most mobile browsers don't support JavaScript, these ads are displayed as ordinary hyperlinks, which is exactly what crawlers are programmed to follow. Without showing them in the analytics and ad campaign reports, you wouldn't know about them and would most likely be paying for clicks that were not real visitors.

### Case Study – Mobilytics Campaign Manager

*Many of our clients who run ad campaigns on the mobile ad networks are surprised to find out how many desktop browsers, and bots are clicking on the ads they are paying for. BY using the Mobilytics Campaign Manager, they are able to identify these invalid clicks, and are armed with the information needed to dispute the charge with the network.*

*Clients also use the Campaign Manager to identify clicks that are outside the targets they specified when placing the ads. If an ad is targeted for a specific phone type or geographic area, the Campaign Manager will show if you were sent traffic outside your specified parameters.*

*Many of the ad networks let you place ads in "channels", but you can't specify individual sites within those channels. They also don't report on which publishers are giving you the best ROI, or the most clicks. Our clients use the Mobilytics Campaign Manager to identify publishers with high-clicks and low conversions. They then request that their ads not be shown on those sites, and they bring up their conversions immediately. How can you buy advertising without being able to identify poor performing publishers?*

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### No Support for Alternating Internet Connections

Mobile phones are designed to be on the move. More and more lately the same phones are connecting to the Internet through different methods. With mobile, we need to be able to identify these visitors regardless of which connection method they use.

#### ❖ WAP Gateway

Most phones access the Internet through the carrier's Internet gateway which is essentially a doorway off the carrier's deck to the real world.

#### ❖ WIFI

Lately, higher end phones and smart phones have built in Wi-Fi connections. This allows you to access the Internet directly through your home or office network, without passing through the carrier's gateway. The iPhone is the perfect example of this. You could begin your visit through the carrier's gateway, and automatically switch to Wi-Fi when you get in range of a wireless network.

#### ❖ Blackberry Enterprise Servers

Blackberry phones can access the Internet through a number of different connections. Blackberrys that are part of a corporate "Enterprise Server", are routed through the corporate network to the Internet. They can also access the Internet through the WAP gateway of the carrier. Additionally,

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some newer models now support Wi-Fi and Bluetooth. Another issue with the Blackberry is that many appear to come from Vancouver, Canada which is where Research in Motion's servers are located.

### No Collection of Mobile Specific Metrics and Details

While most computers have the same capabilities, the range of features over thousands of mobile phones is huge. Traditional analytics track things like screen size, browser, and operating system. With mobile phones we have a need to accurately track over 100 different device features and capabilities.

Device		Audio	
Manufacturer	<b>Nokia</b>	Midi Mono	
Model	<b>N95</b>	Midi Poly	
Device Type	<b>Wireless</b>	AMR	✓
QWERTY Keyboard		MP3	✓
Memory Limit for Markup	<b>357000</b>	AAC	✓
Memory Limited for Download	<b>61440</b>	QCELP	
Memory Limited for Media	<b>0</b>	Video	
Supports Wap Push	✓	Mpeg4	✓
Sends MMS	✓	3gpp	✓
Receives MMS	✓	3gpp2	
Display		WMV	
Screen Resolution Width	<b>240</b>	Mpeg4 Audio	
Screen Resolution Height	<b>320</b>	H263 Type 0	
Max Image Width	<b>229</b>	H263 Type 3	
Max Image Height	<b>300</b>	AMR	✓
# of Colors Supported	<b>18</b>	AWB	✓
Image Types Supported		AAC	✓
Gif87	✓	AAC LTP	✓
Gif89a	✓	QCELP	
Jpg	✓	Networks	
Png	✓	CSD	
Web Browser		HSCSD	
Preferred Markup		GPRS	
XHTML Basic 10	✓	EDGE	
XHTML MP 10		UMTS	
XHTML MP 11		HSDPA	
XHTML MP 12			
Style Sheets			
Scripts			
Https	✓		

### Mobilytics Device Details Screen

We need to collect this data and run reports based on specific capabilities. This gives you an overall picture of your visitors, and what their phones can support. Armed with this information, you can then tailor your site or products to meet your audience.

### Third Party Browsers and Transcoders

To complicate matters even further, there are a number of other technologies that obscure the original information about the mobile phone when a user visits a mobile website. Analytics software must take these things into account, and properly report the visits despite the masking of important details.

- ❖ **Third-party Web Browsers** – While mobile phone come with a web browser built in, there are other browsers that can be installed. A popular example of this is the Opera Mini browser. When your site is visited by someone using Opera Mini, the original phone type and details are not automatically available.
- ❖ **Transcoders** – There is a lot of controversy over the use of Transcoders, and content reformatting<sup>1</sup>. The main purpose of a transcoder is to alter a non-mobile website so that it is displayed better on a mobile phone. Google and Yahoo transcode sites when a search returns a non-mobile site to a mobile phone user. This presents a particular problem when a site already built for mobile is transcoded or reformatted. During the process, the original phone identification is changed to reflect the transcoder's name or alias, and location. We no longer have simple access to the real phone type and the real carrier or country.

### So what can we do?

With all the issues around tracking mobile traffic, you can see why it can be difficult to get accurate, reliable data that can be used to make important financial, and creative business decisions.

Just as we have accepted the traditional web analytics will never be 100% accurate, we must determine what the best solution is for mobile tracking, and what level of accuracy is acceptable for each of our individual goals.

The same is true with mobile analytics. With all the complexities of the mobile universe, do we not track our visitors? Do we not take advantage of a great, personal advertising and marketing channel? Do we settle for wrong or missing data?

### So what's the solution?

## Solution: Mobile Specific Analytics

Well some of us in the industry have finally said “enough is enough”, and have developed working solutions to this problem. Not surprisingly, most of these solutions have come from the mobile community, and not the web analytics vendors.

In this section, we will explore the different approaches that have been taken by mobile analytics vendors, and educate you on what to look for when making a choice of product or service.

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<sup>1</sup> <http://wurfl.sourceforge.net/manifesto/index.htm>

## Mobile Analytics

The reason that most of these solutions come from the mobile community is that the complexities lie in the collection and manipulation of the mobile specific data. The problems to be solved are not in the analytical reporting that has been perfected by the analytics vendors over the last 10 years.

Accurate mobile analytics is about collecting the data properly, and processing it so that it can be either imported into an existing web analytics product, or reported directly from the mobile analytics product.

We've already discussed how web analytics are collected in the wired world, so let's talk about how vendors are solving some of these mobile specific issues.

### Methods of Mobile Data Collection

Just as there are a number of ways to collect web analytics data, the mobile vendors have developed some unique and interesting ways to get around the issues discussed earlier.

#### “Wire-line” Capture

One approach to data collection is to capture detailed data as it passes over the network from the web server to the mobile phone, and vice-versa. This is done by installing a server that all traffic is sent through before it reaches the actual web server.

Using this approach you can take advantage of the fine detail of log files, and combine it with the ability to custom process the data to account for the mobile limitations we've discussed.

One additional benefit of this approach is that you don't need to make any changes to your web pages or web server. The analytics server will capture everything going in or out, and create reports.

However, there are a number of disadvantages.

- ❖ **Customer must install a physical server between the Internet and the web server.**

This is a deal killer for most potential users from the start. Since this approach requires you to install a server, it is only an option for businesses that host their own web server. This solution is mostly popular with wireless operators and enterprises. The majority of web sites are hosted off-site with hosting companies, or with dedicated server providers.

- ❖ **Server creates a bottle-neck, and single point of failure**

Mobile web sites that receive substantial traffic or are mission critical are usually configured to scale and always be available. This is done by putting the site on more than one server. Visitors are then directed to a server based on certain rules and events by using a “load balancer”, a computer or software that keeps track of how busy the servers are and directs the traffic. Load balancers are also used to stop traffic from going to a server that has. This is called “redundancy”. By having more than one server, the load balancer can switch to a backup server instantly if one should fail.

Using “wire line” collection methods for analytics presents a few problems in this scenario. By placing the analytics server in front of the load balancer, you are introducing a single point of failure that can take the whole site down if it should fail. Placing it behind the load balancer would require you to have one analytics server for each web server.

- ❖ **Software upgrades and Maintenance**

Since this method requires a server and software at the physical hosting location, software upgrades need to be done periodically by internal staff. When a new version of the analytics software is

released, it must be applied to the server and this could lead to down time. It also requires maintenance on, and updates to the actual server hardware and operating system software.

Ultimately this type of solution works well for large enterprises, wireless operators, and web hosting companies that host many mobile web sites. For the single site or off-site hosted business, this solution is difficult to maintain and possibly cost-prohibitive.

## Image Tag

The simplest solution is to use an HTML image tag.

**Example:** ``

When the web page loads on the mobile phone, it grabs an invisible image from the analytics vendor's server. This image is loaded in the phone's browser, and the server grabs details about that visitor and logs it.

While this approach is easily installed and implemented, there are a number of issues. The reason that traditional web analytics use JavaScript is that image tags alone don't give you all the information needed for complete analytics. A number of important items can't be tracked when using just an image tag.

### ❖ Page URL

When using an image tag, you need to manually modify each page tag to pass the page URL and title to the analytics server. Besides being a tedious task, this limits the analytics solution's capabilities when doing campaign, ad and conversion tracking.

It is a common practice when placing ads to create a landing page URL by simply appending a source code to the page URL. The analytics solution simply reads this code and tracks the campaign or source.

For example, let's say you are buying ads on a mobile ad network. You decide to test two different ads to see which one converts better.

If your site address is: <http://mymobilesite.com>

You could create the two ads and point one to:

<http://mymobilesite.com?source=ad1>

and the other to:

<http://mymobilesite.com?source=ad2>

Using analytics reports, you could now tell which one of the ads performed better. Without giving them different URLs, you have no way of splitting the data to evaluate which converts better.

### ❖ Referring URL

To me this is the #1 reason not to go with an image tag only solution. The referring URL is the web page that the visitor was on **before** coming to the current page. That page could be either an internal page on your site, or an external web site which would include all search engines and referring links.

This means you would have no way of knowing how much traffic you are getting from Google, Yahoo, or any other search engine. If a mobile site puts a link to your site on their site, you would not know that they came from there.

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Businesses spend considerable time and money making changes to their sites to get good search engine placement. Image tag only solutions can't be used to track your progress, or to determine where your visitors came from.

Top Search Engines	Visits
Google US	26,465
Google Other	9,308
Google Mobile Search	3,057
Google UK	2,785
Yahoo Mobile US	1,375
Google Mobile India	407
Cricket Wap Search	377
Google TH	224
Yahoo	156
Live.com	36

Not knowing the referring URL also means that there is no way to be sure what the path was that the user took through your site. The order, in which the pages are logged on the server, is not necessarily the order in which the visitor viewed them. The technology used for load balancing and logging may not guarantee ordered page views.

### Redirect URLs

This method is the most restrictive of all methods currently available. With Redirect URLs, the analytics vendor creates special URLs on their servers that forward traffic to your site.

<http://AnalyticsVendor.com/1231231233> -----> <http://yourmobilesite.com/index.php>

<http://AnalyticsVendor.com/1231231234> -----> <http://yourmobilesite.com/aboutus.php>

You then need to use the vendor's URLs when placing ads or links to your site.

If you have pages on your site that link to each other (which of course you do), you need to link them to the vendor's URLs and they then forward the visitor back to you.

This method of tracking is just not an option for most people. It's ok when tracking ads to a landing page, but not acceptable for anything else. Can you imagine what happens when the GoogleBot spiders your site and all your menu items link to your analytics vendor's domain?

This method also prevents any kind of organic search traffic from being tracked. Search Engine Optimization is by far the most cost effective way to bring traffic into your site, but lack of proper referrers prohibits you from tracking your progress.

### Log Files

As with web based analytics, log files tend to offer a low level detail that can be beneficial in creating accurate analytics. Without combining log analysis with some of the other methods discussed, log files will produce the inaccurate results due to shared, and alternating wireless carrier gateway IP addresses.

### **Server side code snippet.**

One of the most accurate and flexible options available is the server side code snippet. This is very similar to the JavaScript tag in traditional web analytics. It involves pasting a code snippet into a shared header or footer on a mobile site.

The difference here is that the code snippet is not JavaScript that runs on the phone in the browser. The snippet is code that runs on the web server where the site is hosted. It is installed as easily as the “Google Analytics” JavaScript snippet, but it is quite different.

Analytics vendors offer server side code snippets in many of the popular web development languages. To install the snippet, you need to know what development platform your site is built on so you grab the correct one.

While this can be confusing to non-technical people, it is no more difficult than adding a standard web analytics page tag.

Server side snippets work by collecting all the same information that a JavaScript tag collects. The code then sends the data to the analytics vendor’s servers using a background web call.

The only real drawback of this method is that the page could pause while it is making a secondary web service call to the vendor’s server. There can also be performance issues on high traffic sites since web servers are not built to spawn these secondary calls at such a high rate.

### **Server side code / Image Tag / Log Hybrid**

The last option is the one used by Mobilytics. We believe it is the most accurate, and the best performing solution. A server side snippet gathers the needed information, and a standard HTML image tag is generated. Since the web server’s job is to serve images and web pages, there is no performance issue having to do with secondary web calls.

When the image is loaded in the browser, the server logs all the information needed into special log files. Proprietary applications and coding software parse the logs and produce accurate data. Using this method, you can collect detailed information, and the logs are always available to be reported on again if needed.

The added flexibility of this system allows exceptions to be added to the system after the data has been collected and logged. With over 2000 different phones, gateways and transcoders, we sometimes learn of something that might make unique user tracking more accurate. Using this hybrid method, we can add a new rule to the coding engine and re-run the data for a specific period of time.

## **What to Look for in a Solution Provider**

When looking for a mobile analytics provider, be sure to find out about the following things. Since vendors use different methods of collection and analysis, make sure you understand how they produce the reports that you will be relying on to make important business decisions. I am also listing some features and caveats to look for so that you are always in a position to get the data you need. Changing to a different product is not an easy process once you have begun accumulating data.

One thing you should absolutely do before making a decision is to run a side by side comparison of the vendors you are considering. Place the snippets from multiple vendors on the same pages of your site and compare the data.

Once you begin the evaluation and have some real data, take a look at the reports and ask questions. Get answers from the vendor when you are not 100% you understand why the results are as reported, or how the metrics are calculated. The following are some things to look out for.

### Level of Accuracy: How are Unique Visitors tracked?

First let's start by saying that the level of accuracy is relative to you, and your business needs. While some companies are perfectly happy with a simple visitor counter, others need specific metrics and KPIs such as conversion rate, return on investment, and revenue per visit.

Find out which of the collection methods discussed is used by the vendor you are considering. Have them explain to you in simple terms why their method of identifying unique visitors and visits is the most accurate.

Here are a few answers you might get, and what the possible implications are. Most vendors use a combination of these methods. Make sure to understand which are used by the vendors you are evaluating.

#### Cookies

While it's true that many of the phones don't support cookies, plenty of them do, and more are being added to the market each day. It will be a slow process, and won't be a complete unique tracking solution until 99% of the phones support cookies.

#### Header Analysis

Most of the vendors use some kind of header analysis. When visitors come to your site, there is information that is passed with them that can help identify them. Each vendor has their own proprietary way of analyzing this data and they create a unique fingerprint. With Mobilytics, we take the additional step of assigning an accuracy score to the visitor. This allows you to run reports on subsets of your data based on how sure we are of their uniqueness.

#### Carrier / Operator Relationships

Currently we are receiving traffic from over 500 mobile phone operators worldwide. Some analytics vendors have direct relationships with operators that provide them with information that can be used to enhance tracking of unique visitors. While this may or may not be true, it is difficult to see how having relationships with less than 10% of the world's operators can make much of a difference in overall accuracy. Most of the mobile analytics providers understand that a consistent tracking methodology needs to be put in place across all operators. Favoring specific operators because you have more detailed information only leads to statistically inaccurate data. While the "operator relationships" claim has proven to be a good marketing strategy, it has yet to show increased accuracy.

#### Site Registration & Unique Ids

For those sites that require you to register and login there is an additional advantage. Some vendors can use the user authentication details to identify the user when they return for subsequent visits. This information also helps boost the unique visitor accuracy score which in

turn produces a more accurate sampling of data. Does the vendor you are considering use these to enhance accuracy?

### % of Unknown, Undefined, Unidentified, or Unclassified

In such a fast growing industry, there are bound to be cases where the visitor's phone or wireless carrier can't be determined. Device databases need to be updated daily as new handsets are released into the market, and new operators arrive.

While we can never completely avoid reporting something as "unknown", you should only be seeing a small percentage of them in your reports. Look at the reports carefully and compare the different vendors. If one of your top ten handsets, carriers, or countries is "unknown", then find out why that is. Ask the vendor to explain, or download the data and take a look.

Devices				Countries			
You've had 1,712 page views on 233 devices				You've had 1,712 page views from 62 countries			
1	Unclassified	401	(23.42%)	1	Unidentified	376	(21.96%)
2	Opera Mini	97	(5.67%)	2	China	325	(18.98%)
3	Nokia 3110c	59	(3.45%)	3	Indonesia	166	(9.70%)
4	Nokia 6120c	53	(3.10%)	4	Egypt	92	(5.37%)
5	Nokia N70	51	(2.98%)	5	Saudi Arabia	61	(3.56%)
6	Symbian Safari	37	(2.16%)	6	Philippines	52	(3.04%)
7	Nokia 6300	35	(2.04%)	7	Libyan Arab Jamahiriya	51	(2.98%)
8	Nokia N95	32	(1.87%)	8	Iran, Islamic Republic of	35	(2.04%)
9	Nokia N73	28	(1.64%)	9	India	35	(2.04%)
10	SonyEricsson k800i	27	(1.58%)	10	Kenya	32	(1.87%)

*Sample screen from a mobile analytics vendor (not Mobilytics)*

## Real-time vs. Delayed Reports

Each of the vendors use different processes to create the analytics reports as discussed earlier. Depending on that process, it could take anywhere from immediate to overnight to see your reports.

"Real-time" reports are available for viewing immediately after the visitor comes to your web site. Vendors who offer this should be evaluated carefully for both accuracy, and level of detail.

In order to deliver the most accurate reports possible, the collected data must be put through a number of processes. This takes time. Determining conversions, campaign ROI, visitor sessions, handset and carrier details, and detailed calculated metrics takes dedicated computing power.

Most vendors provide "delayed" reports. Depending on which version of Mobilytics you are using, our data is live from 45 minutes to 12 hours later. Providing every client with "Real-time" data would require many servers and databases, and would greatly increase the cost of our services.

Do careful comparisons between "real-time" and "delayed" products and note the differences. You are usually getting more detail and accuracy from the "delayed" vendor.

Would you rather have the wrong information now, or the right information an hour from now?

## Configurable Time zones

While some vendors allow you to set the time zone that your reports are based on, others force you to use either their time zone, or GMT. Understand the implications of this. What you might be looking at as Friday the 12<sup>th</sup> of November, might actually be ½ of Friday and half of Saturday the 13<sup>th</sup>.

It may look like your best hours are 6pm to 12am, but it might really be 9am to 3pm.

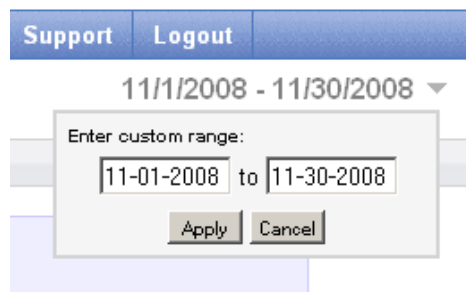
## Standard & Custom Date Ranges, and Historical Data

When evaluating a solution, find out how far back you can report on. Also find out how flexible the date ranges are.

Most of the vendors provide pre-built choices such as:

- ❖ **This Month**
- ❖ **Last Week**
- ❖ **This Week**
- ❖ **Today**

Some solutions also give you the ability to specify the start and end dates for a range.



If you are able to specify a range, make sure you understand how far back you can go and how wide of a range you can specify. Some vendors only allow 31 days at a time, while others will allow up to a few years. If you are in need of annual or quarterly reports, make sure you are able to do this.

## Ability to Trigger Events

Make sure that the solution you choose can track everything you need. If your mobile site has downloads of video or ringtones, then make sure you can track that download with your solution. Since there is no JavaScript, mobile analytics solutions have different ways of tracking downloaded content.

## Scalability of Infrastructure

Mobile web pages are small, and many. It is not unusual for a mobile web site to have hundreds of thousands of page views per day. A few months into our development and testing of Mobilytics, we realized that the system would not scale (grow) well.

If we were to suddenly take on a client that had 1,000,000 page views per day, we would need to add more servers. That was not acceptable. We also track a number of web sites that have huge spikes while running specific campaigns or during specific sporting events. How can you be sure that there won't be an issue handling all that traffic?

Ask vendors how they handle traffic spikes, and how they can assure you that another customer's traffic won't bring your tracking down. Make sure they can always handle your traffic. Check their online blogs and service notifications for reports of downtime. Ask for references and speak to some of their customers.

With Mobilytics we made some major changes to our architecture early on, and moved the tracking servers to what is called an "elastic computing cloud". Essentially this cloud automatically adds and removes servers depending on the amount of traffic that is being received. If a customer runs a campaign and suddenly we are hit with a huge traffic spike, the system simply adds more servers.

### Do they offer a Private Label version?

Some of our customers are agencies, mobile site communities, site builders, and ad networks. These companies are providing mobile analytics for their customers using our platform. They need to apply their branding to our interface. Their customers need to see their logo and colors. While the system is still hosted on our servers, the end-user does not see our URL or our information anywhere.

If you want to let your customers log-in to see their reports, then make sure it's possible. Does the solution you're evaluating allow you to set up new users? Can you assign specific sites to users so they only see what you want them to see?

### Can You Get The Data Out?

Is data exportable? Is there an API (application programming interface) you can access to pull reports?

If you need to do custom reporting in a third-party tool, you need the ability to pull the raw data out and possibly combine it with other business and "non-mobile" data. Find out how the vendor provides this functionality, and in what formats?

### Campaign and Goal Tracking

If you will be using the analytics to evaluate your mobile ad campaigns, then find out how each solution works.

- ❖ Will you need to change anything on your landing pages?
- ❖ Will you need to log in to all the ad networks and change the URLs for all your ads?
- ❖ Can you see the ROI and conversion rates for the individual publishers?
- ❖ Can you enter your costs so you can calculate ROI and other metrics?
- ❖ How many levels are tracked? Campaigns, ad groups, ads, keywords?
- ❖ Can you track SMS and other mobile marketing methods?

## Mobile Analytics

While these are a few things to look for when evaluating a solution, there are many more to be considered. The best way to evaluate is to simply run them side-by-side and see which tool you are more comfortable with, and which appears to be more accurate. Many errors are very obvious. If you see any, ask the vendor to explain it to you.

## About the Author

Greg Harris is the CEO of Mobile Visions Inc, and is the chief architect of Mobilytics. Greg is a serial (and parallel) entrepreneur with 20 years of experience in solving problems through the use of technology.

Greg also blogs about mobile analytics at his Mobile Web Analytics blog @ <http://www.mobilewebanalytics.net>, and about mobile marketing and technology at <http://blog.mobivity.com>

## About Mobile Visions, Inc

Mobile Visions, Inc is a mobile solutions provider based in Princeton, NJ. With a number of industry leading products, Mobile Visions has been able to provide simple solutions to complex problems. For a list of Mobile Visions' products, visit <http://www.movisions.com>

Contact Mobile Visions at [info@mobilytics.net](mailto:info@mobilytics.net), or call 1-866-925-1441

## About Mobilytics

Mobilytics is a leading mobile web analytics solution designed to be the most accurate and most flexible product available.

Mobilytics has often been called the "Google Analytics" for mobile. Its ease of use, abundant features, and superior accuracy make it the ideal mobile analytics solution. Mobilytics is also capable of tracking SMS, mobile phone applications, and mobile widgets.

For a tour of Mobilytics and a free account, visit <http://www.mobilytics.net>. For more information and screenshots, download our presentation at <http://www.mobilytics.net/mobilytics.pdf>.

## About Mobivity

Mobivity is a do-it-yourself mobile marketing and SMS platform. The Mobivity 2-way SMS API is by far the easiest way to integrate your applications with SMS on a short code in the U.S.A.

Mobivity's private label program allows agencies and mobile marketing companies to be up and running in minutes.

For more information, visit <http://www.mobilemarketing.net>

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<sup>1</sup> <http://www.nielsenmobile.com/documents/RealizingPotential.pdf>

<sup>2</sup> <http://www.fiercewireless.com/press-releases/mobile-phone-sales-revenue-increased-47-percent>

<sup>3</sup> <http://www.webanalyticsbook.com/webanalytics-vendor/>