Web Traffic Measurement – The Basics

Setting the standard

About this guide

This guide should help you understand the main methods of analysing and reporting on website activity, and what some of the major companies in this space do. You should also get an understanding of some of the main industry initiatives, and in particular about where we fit in.

What are the most common measurement approaches?

There are three principal ways to collect and analyse data about website usage:

- **User-centric**

  Usage data is collected centrally from a sample (also known as a panel) of website users.

- **Site-centric**

  Usage data is collected by the website owner, or by a third party on their behalf.

- **Network-centric**

  Usage data is collected centrally from a sample of Internet Service Providers (ISPs).

This is because, when a user requests a page from a website, data can be collected at any of the points you can see in the picture below:

Some more detail on each of the three main methods follows.

User-centric Internet Usage Measurement

User based measurement involves recruiting a sample (aka panel) of internet users who are willing to have their usage data collected.

One common approach to this type of data collection is to recruit users who install an application (aka a meter) which tracks the usage of their browser and, in some cases, of other applications. Often, users are

fully aware of their participation in a panel (which may alter their behaviour). Companies collecting panel data often present users with various benefits and incentives to encourage participation such as free software, Internet data storage, virus scanning or chances to win prizes.

Sometimes, however, users have installed a software application to receive a specific benefit but might not be aware of the software's alternative purpose.

Another approach is to use browser toolbar applications. Usually this has the limitation that a self-selected population has to install the toolbar, although sometimes a toolbar may be bundled with the browser in a new computer. Toolbar suppliers often develop their applications only for the most popular browsers.

Site-centric Internet Usage Measurement

Here, website owners (or companies acting on their behalf) report the behaviour of visitors to their site by analysing a set of data representing that site. The data analysed comes from the site's web server log files or from logged data captured via tracking code inserted in a site's web pages (also known as page tags).

Web server logs

Server logs are text files which a server automatically creates and maintains to record its activity. Web servers will record requests for every file they serve (also known as hits). Each file request contains a number of fields containing technical information about the request, such as IP address, URL (the filename of the file requested), User Agent and Referrer. Appropriate analysis of this data can provide web traffic figures.

Page tag logs

Page tag logs are similar to web server logs and are the result of calls for pieces of code (often, but not always, Javascript) associated with an image file added to the code of each page. These calls are made when the web page loads and make a request to another remote server. They are also known as "beacons", "web bugs" or "tracking tags". Because they only run when rendered successfully by the browser, they create a smaller and cleaner dataset than server logs. They can be customised to report a variety of different fields. Appropriate analysis of this data can provide web traffic figures.

Most commercial site-centric web analytics companies use page tagging technology.

Network-centric Internet Usage Measurement

In this approach, a research provider collects the data from one or more ISPs. This can offer a sample size much larger than user-centric panels. Typically network-centric measurement is used to offer a picture of market share.

Be aware that, in the same way as for panel based reporting, the usage data collected depends on the demographics of the sample (e.g. users of a particular ISP) and whether the network provider caters to home users, business users or both.

Network-centric measurement may not seek to build individual relationships with each member of its sample, and so may not collect as much data on them as a conventional panel does.

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Some of the different measurement companies

Company		Type
Adobe	ADOBE® ONLINE MARKETING SUITE Powered by Omniture®	Site-centric (analytics)
Alexa	Alexa	User-centric (toolbars)
ComScore	comScore	User-centric (panels) Site-centric (analytics)
Google	Google Analytics	Site-centric (analytics)
Hitwise	Experian™ Hitwise	Network-centric
Nielsen	nielsen	User-centric (panels) Site-centric (analytics)
Quantcast	quantcast	User-centric (panels) Site-centric (analytics)
WebTrends	webtrends™	Site-centric

What does ABC do?

We audit media owners' site-centric web analytics data to ensure the figures produced comply with the industry-agreed standards set by JICWEBS (the Joint Industry Committee for Web Standards, www.jicwebs.org). We are the only supplier of UK industry-agreed standard measurement certification for census-based, site-centric web traffic data, as we are owned and driven by Media Owners, Media Buyers and Advertisers in the UK.

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How ABC works

What is UKOM?

UKOM is the UK Online Measurement Company set up by the IAB UK and AOP UK to provide panel measurement of UK consumers' activity (user-centric data).

After a tender process, UKOM appointed Nielsen Online to provide the panel research data.

Why are ABC and UKOM figures different?

ABC certifies, as a minimum, global Unique Browsers (not people but device profiles) to a website over (a minimum of) a calendar month. Daily Average Unique Browsers is the industry-agreed minimum mandatory metric; however, Weekly and Monthly Unique Browsers can be certified too. Daily Average Unique Browsers was agreed as the minimum requirement because concerns about cookie deletion and cookie churn become less significant the shorter the period of measurement.

Therefore, ABC figures show total (global) census-based traffic totals for each audited website whereas UKOM figures are based on a UK sample panel of internet users whose activity is tracked by website and then the totals are extrapolated up to represent the UK universe.

Panel research is useful for competitive analysis but does not necessarily represent what actually happened in the month, as it reflects the activity of the sample, which may or may not be representative of the total for any given website. Also, panel research often fails to show or rank the long tail of small and niche websites as they do not have enough traffic to be represented by activity within the sample.

Some key things to understand about ABC and UKOM figures:

- They are gathered using entirely different methodologies
- They answer different questions
- So they are not *comparable*, but they are *complementary.*
- Both are useful for media owners and media buyers