

Use of Key Performance Indicators in Web Analytics

More than ever, site managers today rely on Web analytics to get insights into the performance of their Web site. The information is used to help them optimize their site performance by eliminating navigational bottlenecks, identifying the best sources of acquisition, improving merchandising effectiveness and more.

While Web analytics solutions have matured from pure clickstream and traffic analysis tools to robust analytics solutions, the abundance of information has made it difficult for managers to get the data they need. To address this, solutions should provide users with an easy-to-use, flexible interface to define and get KPIs specific to their business. This white paper will discuss some of the most common KPIs using Web analytics.

Key Performance Indicators

Key Performance Indicators, also known as KPI are quantifiable measurements that help decision makers define and measure progress toward organizational goals. KPIs vary drastically from one industry to the next. Examples may include load factor and fuel consumption per passenger for airlines and dropped call percentage and customer acquisition cost for wireless carriers. For this reason, KPIs are defined by business users and may be unique to each business.

Use of Key Performance Indicators in Web Analytics

Web analytics refers to the collection, analysis and reporting of Web site usage by visitors. The information helps site managers better understand the effectiveness of their online initiatives and helps them optimize their Web site. This optimization process could occur in a number of areas, including site content, media and promotional mix, merchandising, site process designs, maximizing the value of site initiatives—such as the internal search tool—and much more.

Web Analytics can be effectively applied to optimize the performance of four site types. Most Web sites will fall within one or more of these site types. The following is a brief explanation of each.

- **Commerce:** In this environment, the goal is to get customers to buy directly online. Examples of such sites include Amazon, Best Buy and proflowers.com.

- **Lead Generation:** In this model, the goal of the site is to get visitors to submit their contact information so that they can be contacted by the company's sales force. Examples of such sites include New York Life, Sun Microsystems and Northwestern Mutual, which focus on sales of specialized products and services.

- **Content/Media:** Content sites revolve around the advertising business model. Examples of such sites include ESPN.com, abcnews.com and foxsports.com. The goal is to get visitors to keep coming back. Content should therefore be refreshed at appropriate rates for such sites to be successful.

- **Support/Self-Service:** The support or the self-service model revolves around providing customers with the ability to find the answers they need regarding their products. This model revolves around cost savings associated with deflection of call center volumes.

For a Web site to benefit from Web analytics, it should include one or more of the site types mentioned above. For example, the Web site of a software company may include e-commerce for direct sales of software, lead generation for direct selling by the sales force, as well as a self-service site for helping with customer support issues.

Just as KPIs vary widely from one industry to the next, they also vary based on site type. The purpose of this document is therefore to shed some light on some of the most commonly used KPIs based on the site types defined above.

Key Performance Indicators for Commerce Sites

To be successful, e-commerce sites should be able to convert visitors into buyers and get them to come back for repeat purchases. For these reasons, e-commerce KPIs should be centered on online conversion and retention strategies. Some of the most popular KPIs within commerce sites include average selling price, visit value, new vs. repeat customer breakdown, average selling price by new vs. repeat customers, and conversion rates.

- **Average selling price (ASP):** also referred to as average order value, is simply the ratio of revenue divided by orders or transactions. This is arguably the most commonly used KPI among e-commerce sites.
- **Visit Value:** This KPI is calculated using the ratio of revenue divided by visits or sessions to the site. This powerful KPI reveals the value of each visit to the site and can effectively be used as a benchmark in evaluating promotional traffic to the site. The goal of advertising managers is to make sure that the traffic they're purchasing is higher than the site average.
- **Conversion rates:** There are a multitude of ways to measure conversions (Figure 1), with the most common ones being order conversion rate (ratio of orders to visits), buyer conversion rate (ratio of customers acquired to visitors to the site), checkout and cart conversion rates.

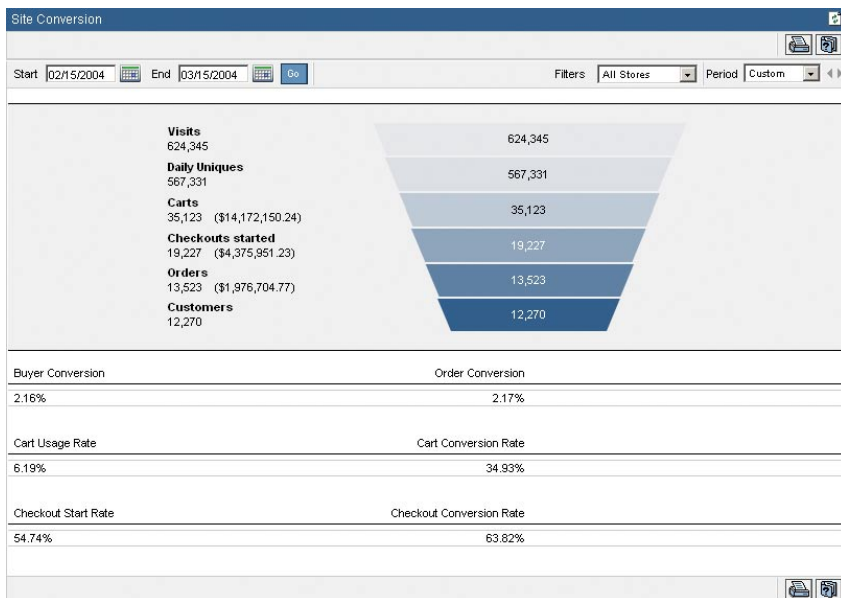


Figure 1: Site Conversion report from HBX. KPIs presented include order conversion (orders to visits), buyer conversion (buyers to visitors), cart usage rate (carts to visits), checkout start rate (checkouts to carts) and cart and checkout conversion rates.

Once the key performance indicators have been defined by decision makers, users of Web analytics can then customize the solution's dashboard to include these important business indicators. Figure 2 showcases an e-commerce dashboard

using HBX Report Builder, a Microsoft Excel plug-in that lets users create ad-hoc reports from within the Excel environment. The application lets users create any custom report using their HBX Web analytics data and automate or schedule the delivery of their custom reports to various users within the organization.

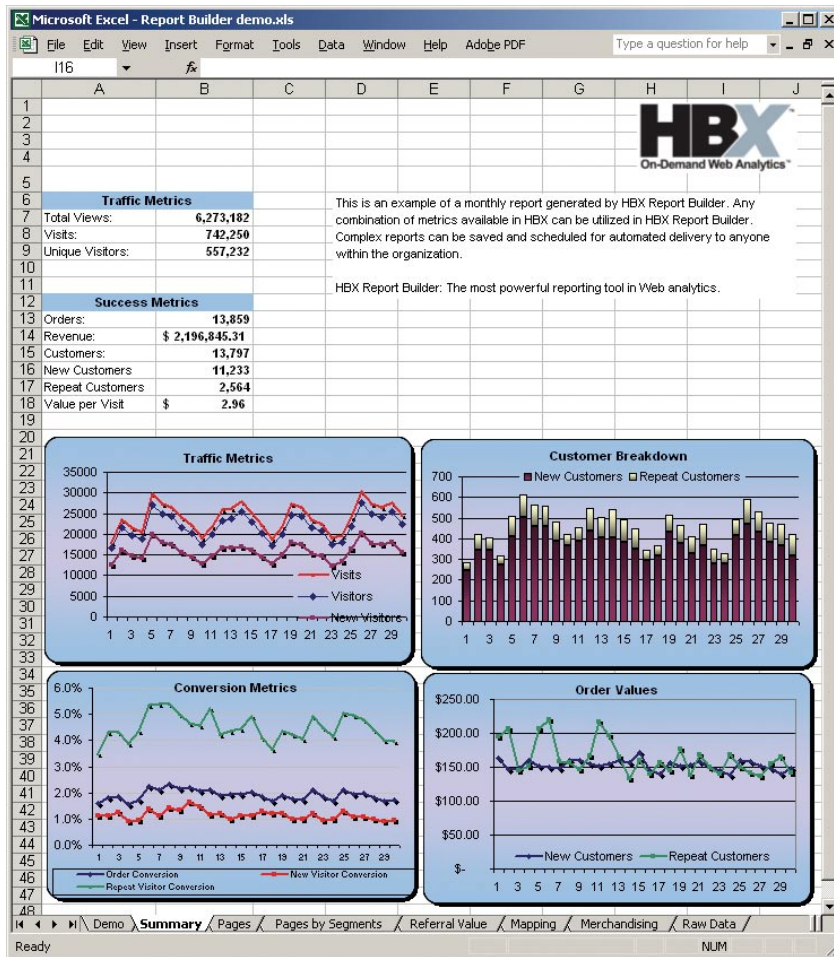


Figure 2: KPI Dashboard for an e-commerce site. Conversion rates for all visitors, new and repeat visitors are plotted over time, along with the average selling price for new vs. repeat customers. KPIs demonstrated include order and buyer conversion, as well as visit value.

Key Performance Indicators for Lead Generation Sites

Just as many of the KPIs used by e-commerce sites are conversion-centric, so are the ones used for lead generation sites, where the goal is to generate online leads. Some of the most commonly used KPIs for lead generation sites include cost per lead, conversion rate, single access ratio and traffic concentration.

- **Cost per lead (CPL):** Cost per lead measures the cost incurred by the company in generating the lead. CPL can be calculated at different levels. It can be calculated at the aggregate level, where it is measured by total expenditures divided by total number of leads. This cost can then be used as a benchmark to help assess individual marketing promotions. The goal of the marketing manager in this case is to make sure that the cost per lead at the campaign level is less than or equal to the overall cost per lead.
- **Conversion rate:** Conversion rate is simply the number of leads generated divided by number of visits or sessions to the site. This important KPI helps managers assess the effectiveness of their promotional campaigns. Comparing campaign-level to site-wide conversion rate provides managers with an easy way to measure the value of their marketing campaigns.
- **Single access ratio:** Single access ratio is defined as the ratio of single access pages to entry pages. Single access is defined as visits that do not make it past a page or a site content area. The single access ratio can be measured both at the page or content-level. High single access ratios are indicative of problem pages or contents—areas of the site that are ineffective at getting people past the entry pages.
- **Traffic concentration:** Traffic concentration is simply the ratio of visitors on a page or a content area divided by the overall site visitors. This ratio is a good indicator of visitor interest in the page or content area being analyzed, where a high ratio indicates a high level of interest. The site manager's job is to put more emphasis on areas with high traffic concentration, since they are the areas of most interest to visitors.



Figure 3: HBX Dashboard. With the ability to create and report on business KPIs, the dashboards in HBX provide the intelligence needed to quickly make educated decisions to improve the effectiveness of the Web site.

Figure 3 showcases a screen shot of a custom dashboard created in HBX. By providing the ability to define business goals and KPIs and measure site activity around them, business decision makers can make informed decision about the success of their site in no time.

Key Performance Indicators for Content/Media Sites

The Content or Media model revolves around serving content to site visitors. The nature of the content could vary anywhere from sports, news, lifestyles or other subjects. The revenue in this model is generated from advertising. The key performance indicators should therefore revolve around optimizing the traffic to the Web site. Some of the common KPIs used in this model are described below.

- **Depth of visit:** Measured as the ratio of page views to visits, depth of visits is a measurement of interest in the content provided by the Web site. Larger numbers indicate more interest in the content provided and is desirable for media sites.
- **Visits/visitor:** The ratio of visits to unique visitors is another good measurement of interest. This measurement is visitor-centric in nature. While depth of visits is reflective of the level of interest to site content, this indicator is a reflection of the site's success at bringing visitors back to the site. A larger number indicates a better success at retaining visitors and is desirable for media sites.
- **New visitor percentage:** The new visitor percentage is the ratio of new visitors to unique visitors and lets managers quickly assess the effectiveness of the site in acquiring new visitors. This number depends to a great deal on the business cycle. If the site is in new visitor acquisition mode (as many new sites are) then a high ratio is desirable. If the site is in visitor retention mode, then the goal should be a low ratio.
- **Content depth:** Content or page depth is measured using the ratio of content or page views to visitors at the content or page level. Like depth of visit, content depth is a measure of visitor interest in the content provided. Content depth should be measured for key site content and benchmarked over time. A drop in the content depth is indicative of the need to refresh content.

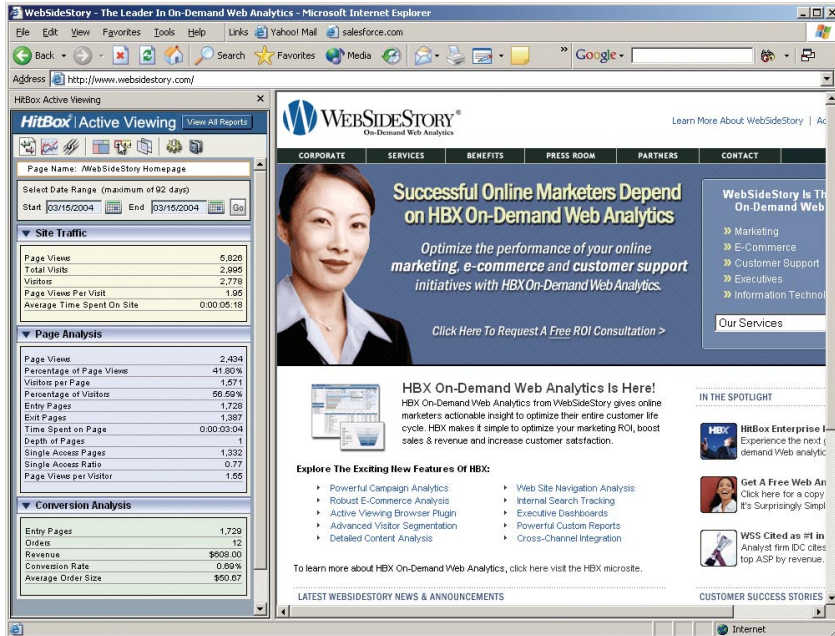


Figure 4: HBX Active Viewing is a browser plug-in that provides real-time reports as the user browses site pages. KPIs provided included single access ratio, page traffic concentration (visitors per page divided site visitors) and depth of visit and content/page depth.

Figure 4 showcases a number of KPIs in HBX Active Viewing, a browser plug-in that overlays Web analytics reports related to the page being viewed by the user.

Key Performance Indicators for Support/Self-Service Sites

Enterprises today face the daunting challenge of simultaneously maximizing customer satisfaction and minimizing costs. The Web-based support/self-service model revolves around providing fast, accurate answers to end-users' questions. The result is reduced support costs for the organization. A study by Forrester reveals that the average cost per transaction using the traditional phone channel or call center is as much as \$33 compared to \$1.17 for the Web self-service site. Based on this data, enterprises can achieve tremendous cost savings by deflecting phone traffic to the self-service channel. In this case, the optimization of the self-service Web site should revolve around serving the appropriate content to help deflect support calls. A number of KPIs can be used to help managers better understand the effectiveness of their support/self-service site. These include the satisfaction index, repeat visitor percentage and content depth.

- **Satisfaction index:** The satisfaction index is a direct measurement of visitors' satisfaction level with the site content and can be measured by integrating survey data with the Web analytics solution. The use of custom metrics in HBX provides the ability to collect external data such as survey responses. Once collected, the reports can be displayed either in the HBX interface or used to create an index such as the one displayed in Figure 5 using HBX Report Builder. The goal of the site manager is to constantly increase the visitor satisfaction index with the Web site.
- **Repeat visitor percentage:** The repeat visitor percentage is the ratio of repeat visitors to unique visitors. It lets managers quickly assess the site's ability (or inability) to resolve customer issues. A high repeat visitor percentage is indicative of high number of repeat visits, which is cause for concern for support/self-service sites. It indicates that customers are not finding easy answers to their questions and are therefore making further investigation on the support pages.
- **Content depth:** The content depth ratio was described in the last section and is a valuable indicator for support sites as well. However, while a high content depth is the goal of media sites, a low ratio is the desired goal of support sites. High content depth indicates visitors' inability to find the answers they need within the content area. Content areas with high depth should be targeted and optimized in order to bring visitor satisfaction to acceptable levels.

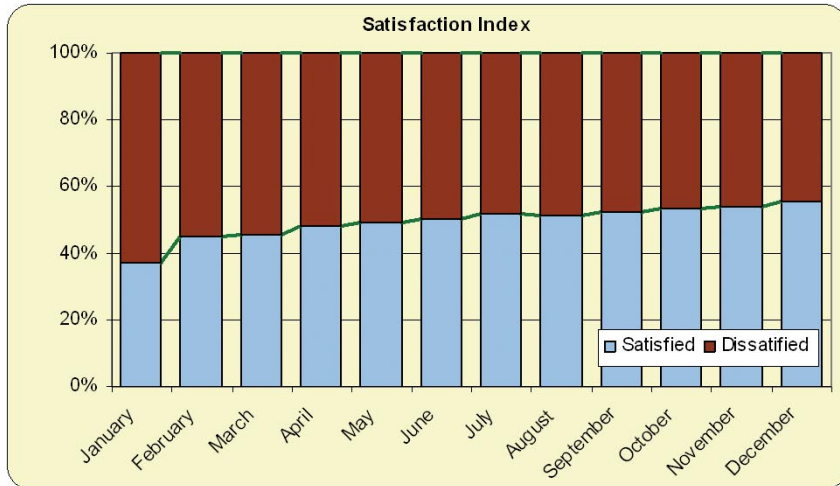


Figure 5: An example of overall satisfaction measurement using HBX custom metrics and Report Builder. The site manager’s task is to increase the overall percentage of satisfied users (blue chart).

Conclusion

KPIs are an effective management tool because they translate complex measures into a simple indicator that allow decision makers to assess the current situation and act quickly. For KPIs to be effective, however, they need to be actionable—meaning they should report on the metrics that matter to the organization. Once the KPIs have been defined, the next step is to combine them in an executive dashboard.

HBX provides an unparalleled flexibility to create customizable dashboards that include user-defined KPIs. This flexibility, coupled with HBX Report Builder provides the most actionable user-interface in the industry.

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