David Horowitz (USA)

Course evaluation with Google Analytics

Abstract

The purpose of this paper is to discuss how Google Analytics data can be used to conduct course evaluations. To accomplish this goal, a review of the methods followed to gather Google Analytics data on a WordPress website used to teach two sections of a marketing research class is presented. Traditionally, it has been the responsibility of students and peers to conduct course evaluations. With Google Analytics and other online tracking methods, it is possible to gather additional data that can be used to conduct course evaluations.

Keywords: marketing education, Google Analytics, online marketing.
JEL Classification: M31.

Introduction

Online marketing, engine optimization search, and social media marketing are just some of the new marketing topics that are becoming more common as ecommerce and communication technologies evolve. Likewise, the education landscape is evolving to include online courses and to incorporate new educational technologies into classrooms, computer labs, and distance learning settings. In addition, it has become common practice for companies to gather website traffic data, but it is not a common practice for marketing educators to analyze their own website traffic data. In order to connect these three areas of online marketing, online education, and web analytics, this paper will demonstrate how marketing educators can use Google Analytics, one of the most popular website analytics tools (http://www.bestvendor.com/best/analytics?sort=popular), to evaluate their courses.

There are also great new educational materials that marketing educators can use to learn Google Analytics and to teach Google Analytics. For example, both Google and Lynda.com offer video tutorials by industry experts. This educational content can help marketing educators and marketing students gain some of these new marketing skills.

In order to demonstrate how Google Analytics can be used for course evaluation purposes this paper is divided into three sections. First, a literature review of the course evaluation and online analytics marketing education literature is offered. Second, a description of the methods used to gather Google Analytics data for course evaluation purposes is provided. Finally, concluding thoughts are presented.

1. Literature review

The marketing education literature contains a great deal of discussion on the topics of course evaluations (Chen and Hoshower, 2004; Clow, 1999; Mintu-Wimsatt, 2001; Mintu-Wimsatt, Milward and Russ, 2006; Ortinau et al., 1989; Schwartz and Thornton, 1986; Wilhelm, 2004) and student evaluations (Clayson, 2009; Neale et al., 2009; Paswan and Young, 2002; Simpson and Judy, A. Sigauw, 2000; Webster, 1990). Because online marketing is a more recent phenomenon, the marketing education literature does not contain as much of a discussion of online analytics or Google Analytics in particular. Wymbs (2011) calls for the need for a new academic major: Digital Marketing. Clayton and Hettche (2012) discuss teaching website usability testing. Just as these authors discuss the importance of evaluating website usability, this paper aims to discuss how Google Analytics can be used to assess students use course website. In order to bridge the gap between the course evaluation and online marketing education research, the next section examines how the Google Analytics data gathered from a class website can be used for course evaluation purposes.

It is important for marketing educators to understand how they can incorporate web analytics tools such as Google Analytics into their classes so that they can evaluate their courses from a new perspective and teach marketing students how to use web analytics tools in new marketing areas such as search engine optimization and ecommerce.

2. Method

Google Analytics observational tracking data was gathered on a marketing instructor’s WordPress website that was used to teach two sections of a semester-long undergraduate marketing research course. The two undergraduate marketing research sections of approximately 30 students met in an on-campus computer lab once per week. The marketing instructor’s website contained the teaching materials for the weekly topics covered during the 16-week semester. In addition, each of the two sections of marketing research had a Moodle site that contained links to the instructor’s WordPress website, student grades, and a discussion forum where students posted their weekly assignments for course credit.
For the 16-week semester there were a total of 15 weekly marketing research topics. Each of the 15 weekly topics were placed on separate web pages (and urls), and Google Analytics data was gathered for each of the 15 web pages. The setup process for gathering the Google Analytics will now be discussed in greater detail.

**Google analytics setup.** The marketing instructor installed Google Analytics on the website used to teach the two sections of marketing research. On the Google Analytics home page there is a section dedicated to learning Google Analytics (http://www.google.com/analytics/learn/index.html) and within this page there is a getting started checklist (http://www.google.com/analytics/learn/index.html). There are also great resources to learn Google Analytics at Lynda.com (http://www.lynda.com/Google-Analytics-training-tutorials/411-0.html) and other online training websites.

**Filtering an IP address.** With the Google Analytics tracking code installed, data will be gathered throughout the semester. One additional step an instructor might want to take is to filter out their home IP address, so that the instructor’s own visits is not confounded with the website traffic data. The marketing instructor worked from home to prepare the 15 weekly marketing research topic web pages, so a filter was created to exclude traffic data from the marketing instructor’s home IP address.

**Customizing the date range.** Google Analytics allows users to set a custom reporting date range that can correspond to a semester or quarter date range. The marketing instructor set a custom date range from the first week of the Fall 2012 semester (August 20, 2012) through the end of finals week (December 14th, 2012). This custom data range allowed the instructor to focus on the website traffic from the two sections of marketing research.

**Audience demographic location report.** Google Analytics allows users to filter reports by specific geographic regions. If an instructor is targeting students in a specific geographic region, then the instructor can customize the Google Analytics data to reflect just a single state, county, or city. In order to focus on the traffic data around the region where the instructor was teaching the two sections of marketing research, the instructor filtered the Google Analytics traffic data to only include traffic from the state of California.

**Content report.** Google Analytics allows users to gather traffic data on each page of a website. The content report was used by the marketing research instructor to evaluate how students followed the class throughout the semester. Figure 1 displays the content report with the filters described a priori. The content report shows traffic spikes on Tuesdays when the two sections of marketing research met in the computer lab on campus (see Figure 1 in Appendix).

In order to further analyze the Google Analytics data, the traffic for the weekly topics were ranked based on the number of pageviews, and is presented in Table 1. Table 1 demonstrates the most popular weekly topics were weeks 7, 1, and 13; and that the least engaging weekly topics were weeks 6, 15, and 10.

Table 1. Weekly topic traffic rankings

<table>
<thead>
<tr>
<th>Rank</th>
<th>Weekly topic</th>
<th>Pageviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week 7</td>
<td>214</td>
</tr>
<tr>
<td>2</td>
<td>Week 1</td>
<td>126</td>
</tr>
<tr>
<td>3</td>
<td>Week 13</td>
<td>125</td>
</tr>
<tr>
<td>4</td>
<td>Week 14</td>
<td>114</td>
</tr>
<tr>
<td>5</td>
<td>Week 5</td>
<td>113</td>
</tr>
<tr>
<td>6</td>
<td>Week 12</td>
<td>109</td>
</tr>
<tr>
<td>7</td>
<td>Week 3</td>
<td>108</td>
</tr>
<tr>
<td>8</td>
<td>Week 2</td>
<td>106</td>
</tr>
<tr>
<td>9</td>
<td>Week 9</td>
<td>101</td>
</tr>
<tr>
<td>10</td>
<td>Week 4</td>
<td>96</td>
</tr>
<tr>
<td>11</td>
<td>Week 11</td>
<td>70</td>
</tr>
<tr>
<td>12</td>
<td>Week 8</td>
<td>52</td>
</tr>
<tr>
<td>13</td>
<td>Week 6</td>
<td>51</td>
</tr>
<tr>
<td>14</td>
<td>Week 15</td>
<td>49</td>
</tr>
<tr>
<td>15</td>
<td>Week 10</td>
<td>36</td>
</tr>
</tbody>
</table>

**Conclusion**

As online marketing becomes more common and as marketing educators put more educational content online, it will become more common for marketing educators to use online traffic data for course evaluation purposes. Marketing educators are not commonly taught how to use Google Analytics or other web analytics data, but there are great resources that marketing educators can use to learn Google Analytics.

The two best resources to learn Google Analytics are the Google Analytics website and Lynda.com. Google Analytics dedicates a portion of its website to resources that can help people learn Google Analytics (http://www.google.com/analytics/learn/index.html). This section contains links to beginner resources, instructional videos, and seminars that are offered around the world. Google also has a YouTube channel (http://www.youtube.com/user/googleanalytics) that contains videos for different audiences who are interested in learning the latest about Google Analytics.

An additional resource that has great resources to learn Google Analytics is Lynda.com. Lynda.com offers contemporary video tutorials taught by industry experts on Google Analytics (http://www.lynda.com/Google-Analytics-training-tutorials/411-0.html).
Finally, Lynda.com offers a section called Google Analytics Tips that is updated on a weekly basis (http://www.lynda.com/sdk/Analytics-tutorials/Google-Analytics-Tips-Tricks-Tutorials/135364-2.html). It is nice to be able to offer students a one stop shop that contains all of the educational materials they will need to learn Google Analytics, and Lynda.com is a great resource that can offer students a one stop shop for learning Google Analytics.

After students become familiar with Google Analytics they can use Google Analytics to learn other skills such as search engine optimization. Lynda.com offers good beginner video tutorials on search engine optimization (http://www.lynda.com/sdk/Google-Analytics-tutorials/SEO-Fundamentals/89810-2.html) and the site moz.com (http://moz.com/learn/seo). Google also has other services like AdWords and YouTube that offer web traffic services that are based on Google Analytics or are similar to Google Analytics.

By tracking student website traffic with Google Analytics, marketing educators can evaluate how popular the weekly topics of their class are how popular their class is in general. Marketing educators can use this knowledge to improve their weekly lectures and courses overall.

References
Appendix

Google Analytics

Pages
Pages are grouped by Page

% of pageviewers: 100.00%

Site Usage

August 20, 2012 - December 14, 2012

Pageviews

<table>
<thead>
<tr>
<th>Pageviews</th>
<th>Unique Pageviews</th>
<th>Avg. Time on Page</th>
<th>Entrances</th>
<th>Bounce Rate</th>
<th>% Exit</th>
<th>Page Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>14,243</td>
<td>11,036</td>
<td>00:04:21</td>
<td>9,386</td>
<td>73.15%</td>
<td>65.90%</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

Fig. 1. Google Analytics data