

PEGASUS CREATIVE

Google Analytics and the Modernization of Marketing

Web Content Development Internship

Chandler Anderson

5/12/2013

One of the most important functions of any kind of business is gathering knowledge about their customer base. This allows the business to identify their target market and shift their marketing strategy based on what they learn about the wants and needs of that market. Traditionally, market research has been done using techniques such as focus groups and surveys, but these types of methods have often proved to be flawed and cause distortion between the information the tested demographic relays to the company and the demographics' true thoughts and intentions. Also, these methods require material resources to execute, and generate costs for the company even when they fail to generate useful information about the target market. Fortunately, the inception of the Internet has pushed these costly and ineffective techniques into obsolescence, and created what could be considered the ultimate consumer observation platform. Millions of people use the Internet on a daily basis, and this artificial, digital space has many aspects which can be utilized by marketers to better understand and position their products for their target market. One tool that has recently become popular for exploiting these aspects is Google Analytics, which gives website owners the ability to track statistics on who visits their site and how visitors use and interact with the site. These types of tools have vastly modernized the means through which companies can build an understanding of their target market.

The technology behind Google Analytics originated as software developed by Urchin Software Corporation, a San Diego, California based web analytics company. This software, called Urchin, was a “web site analytics solution used by web site owners and marketers to better understand their users’ experiences, optimize content and track marketing performance.”¹ In a bid to enter the online analytics market, Google agreed to acquire Urchin in March 2005, and after tentatively offering the service as “Urchin from Google”, rebranded it as Google Analytics

¹ Crosby, Brett. *Google Agrees To Acquire Urchin*. (28 March 2005). Retrieved from News from Google, at http://googlepress.blogspot.com/2005/03/google-agrees-to-acquire-urchin_28.html

in November of that same year. In the official announcement from Google's blog, their Product Marketing Manager Brett Crosby testified that with the release of this free analytics software, "the same service...used by dozens of Fortune 500 companies is now available to every business on the web." They also sought to integrate this service with their popular AdWords web advertising platform, thus allowing businesses advertising through Google to gain sophisticated statistics about incoming traffic from their Google ads to their website.² In part by providing this analytical service for free, Google has enabled small business with fewer resources than larger companies to better understand their target market.

With Analytics, Google sought to make web statistics more accessible and easier to manage for the average website owner by organizing the information in a user-friendly manner. First of all, they made the process of adding tracking to a website straightforward: when an administrator sets up Analytics on their Google account, they are asked to provide some simple information about their site, such as its title, URL, industry category, and desired account name. Then, Google assigns the website a tracking ID and generates HTML-formatted tracking code to add to the source code of your website. Once they have added this code, visitor data will begin to be funneled to their Google account. In addition to the basic tracking code, there are plugins available for CMS (content management system) platforms such as WordPress which connect directly to their Google account and provide additional data and functionality, such as tracking outbound links from your website to other sites. All of the data gathered by Google Analytics is displayed graphically in reports which aggregate and display collected information in different ways: administrators can look at Audience reports for insight into the kinds of visitors that visit their site, Traffic Sources reports to see how visitors arrived at the site, Content reports to find

² Crosby, Brett. *The circle of analytics*. (14 November 2005). Retrieved from Google Official Blog, at <http://googleblog.blogspot.com/2005/11/circle-of-analytics.html>.

out how visitors interacted with the site, and Conversions reports to discover whether visitors are successfully doing what they want them to do with the site. These reports allow administrators to narrow down the information gathered by Analytics according to what they find relevant for meeting their strategic objectives, in a format that can easily be presented to their colleagues or superiors.

By looking at their Analytics reports, businesses can gather quantitative and qualitative statistics based on how visitors interact with their site. First of all, Analytics tracks visits, meaning the number times an internet user has entered the site. It also tracks unique visitors, which is an important distinction from visits in that these are individual visitors who may have visited the site multiple times in the past. From these stats, Analytics derives the percentage of visits which come from either new visitors or returning visitors. It also tracks the duration of each user's visit, as well as the "bounce rate", which records the percentage of users who visit only a single page of the site without interacting with any links on that page: depending on the context, these statistics may indicate either an effective page or site which successfully conveys information to the user, or an ineffective page which disinterests the user and causes them to look elsewhere for their needs. In addition, any descriptive visitor data which is publically indicated by their web browser can be tracked by Analytics. Demographic information about a visitor's language, location, type of browser, operating system, type of mobile device (if they are using one) and network provider can all be collected by Google.³ These parameters can all be accessed from any of the reports offered by Google Analytics. One such report is the Visitor Flow report, which tracks the path of visitors from when they enter the site until they exit, according to demographic. For instance, an administrator can track how visitors from a particular operating

³ Appendix: *Exhibit 1. Google Analytics for Oglethorpe's summer site: Audience Overview*

system navigate the site. All of these demographic segments can easily be singled out from the collected data pool and compared with other segments, giving administrators multiple dimensions from which visitors can be categorized and analyzed.⁴ When properly interpreted, this data can indicate the successfulness of a business's website with visitors in its target market.

When a business wants to learn more about their target market's wants and needs, they pursue marketing research, which is "the process of planning, collecting, and analyzing data relevant to a marketing decision."⁵ This process incorporates both primary and secondary data: primary data is that which business has collected first-hand through researching for a particular project, while secondary data is anything that is collected from research unrelated to that project. Methods of primary research include survey research like mail surveys and focus groups, where data is gathered directly from input drawn from the customer base⁶, and observational research, where data is gathered from directly observing the customer base's behaviors.⁷ Traditional modes of these research methods have tended to skew results and be unreliable: for instance, survey research relies on the willingness of the participants to cooperate in order to collect worthwhile data, and not everyone is predisposed to provide answers that accurately reflect their thoughts on a company or product. Observational data is more accurate when the studied group is unaware of being observed, and when this observation is done in a physical environment, it is more difficult to practically conceal the means of observation, whether it is people or machinery recording this data. With the popularization of the Internet, an increasing number of consumers are taking care of their business in a digital space, and by observing their behavior with tools like Analytics, website owners can track the behavior of their site's visitors more accurately and with

⁴ Appendix: *Exhibit 2. Visitors Flow according to Operating System*

⁵ Lamb, C. W., Hair, J. F., & McDaniel, C. (2012). *Marketing*. (5th ed., p.140). Mason, OH: South Western, Cengage.

⁶ Ibid. p.143

⁷ Ibid, p.146

less effort than if they were observing them in physical space such as a retailer. This ease of observation has revolutionized marketing research, and allowed marketers to access a more reliable set of data about consumer behavior than was possible before the Internet became widespread.

One example of a small institution which has taken advantage of Analytics is Oglethorpe University, which has already been able to see results in a recent campaign to improve enrollment in its Evening Degree Program. Todd Bennett, Executive Director of University Communications, has become Oglethorpe's resident advocate of data analytics. Bennett explained that when he was tasked with promoting the EDP, he eschewed traditional advertising techniques such as print ads and television and radio commercials, which he said were expensive and had been previously executed with "no strategy and no measurement of what really worked", in favor of media which could be accurately tracked based on results versus cost. When he saw that email and direct mail produced poor results for the investment they required, he dropped them because he could see through Analytics that they were ineffective at drawing traffic to the EDP site compared to Google and Facebook ads. "When you're working with very small budgets, it's vital you can maximize your ad spend," Todd said. "Analytics allows us to do just that."⁸

Though having these tools so readily available is a fantastic boon for small companies which previously would not possess the means to such data, their biggest obstacle is interpreting these statistics in such a way that which give them insight into how they can improve their marketing plan. Bennett has observed that a "big problem with web analytics is that many marketers don't really understand how to use it. It's very easy to make the numbers say whatever

⁸ Bennett, Todd (2013, May 10). Email interview.

you want them to. Without defining a specific method for measuring a specific strategy, general web stats don't really allow you to legitimately infer much of anything.” Statistics such as visit duration and bounce rate are especially vague without a previous understanding of their context, and have meanings that change based on the purpose of that particular page or site. Bennett encourages marketers to consider these factors when analyzing these statistics: “Is a high bounce rate on your home page a bad thing? Maybe not if you're a bank and the majority of your visitors are trying to access your online billpay, which may be housed under a different domain (and hence appear to analytics as ‘leaving the site’). A high bounce rate could be indicative of a high success rate for billpay customers.” Moreover, when presenting these statistics to superiors, Bennett suggests explaining the context of these numbers rather than misleading them to assume one extreme of a metric, such as low bounce rates or long visit durations, is always better: “Is a lot of time spent on your site a good thing or bad? Well, it's easy to tell your senior leaders that people are spending more time on your site than ever before, and have them all praise you for making your site “sticky”. But what if users are spending a lot of time, in frustration, because they can't find what they are looking for?”⁹ These analytics are useless without a proper interpretation of what they convey about user's website experience.

By learning about their target market, businesses can create a strategic plan which will strengthen their connection with that market. In the past, the data used for forming this knowledge base was harder and more costly to obtain, but with new tools such as Google Analytics, this data has become much more accessible for smaller businesses. But, simply possessing this data is not enough to produce results for a company: they must have a proper understanding of how to apply market research to a marketing plan. Bennett believes that

⁹ Bennett, Todd (2013, May 10). Email interview.

“understanding marketing theory and practice, basic research and testing and how to effectively use analytics is one of the best investments [small companies] can make. Unfortunately, these very groups often don’t understand those things and therefore don’t see the value in such an investment of time when they have so little time to invest.”¹⁰ Having analytical tools is not an adequate replacement for marketing expertise, since a company still needs to have a strategic plan for their product and possess the means to execute that plan. Analytics simply provide a better basis from which businesses can understand their target market and shape their pre-existing plans to meet their market’s needs.

When writing their marketing plans, there are several elements small businesses must evaluate: their interpretation of analytics will be derived from these elements, and will also be the basis for refining these elements with their improved understanding of their target market. First of all, they must have a mission statement which gives their business some kind of general purpose and direction for their operations: from this, a business can narrow down the objectives they seek to meet through analytics to those which contribute to the overall mission of the business. Secondly, they must analyze their current environment: this is often approached through a SWOT analysis (internal Strengths and Weakness, external Opportunities and Threats).¹¹ To gather data about opportunities and threats, businesses use environmental scanning, which is the collection and interpretation of information which may influence their marketing plan. Demographics are one of the forces which exist in this external environment, and by gathering data about the audience of their website, businesses can identify trends and derive potential opportunities and threats which could shape their overall marketing strategy.

¹⁰ Bennett, Todd (2013, May 10). Email interview.

¹¹ Lamb, C. W., Hair, J. F., & McDaniel, C. (2012). *Marketing*. (5th ed., p.18). Mason, OH: South Western, Cengage.

Once they have established their target market and their marketing strategy, a small business can adjust their marketing mix based on new insight gained from analytics. The marketing mix contains four elements, commonly referred to as “the 4 P’s”: product, place, price, and promotion.¹² For an e-commerce site, a website which sells products directly to customers through the Internet, the insight that can be gained from Google Analytics is invaluable in determining how visitors respond to their products and the appropriate course of action for modifying one or more of these 4 P’s in order to better appeal to a particular demographic. If Google Analytics shows that a particular product page is not getting a lot of traffic or that the product is not selling particularly well, then the company might try to make that product more visible by putting a banner on the front page promoting the product, encourage sales by discounting the price, improve the product itself if that is within the company’s means, or some combination thereof. Companies can see how customers respond to changes in strategy by comparing analytics from before and after the change, and from there decide whether to reconsider their strategy if results are the same or worse, or continue with the strategy if results have improved.

In order to assist businesses and website owners in matching Analytics data with tangible applications to their strategic plans, Google has implemented two features into Analytics which allow them to better structure data into a format which can easily be interpreted applied to elements in a marketing plan. The first of these tools is the Advanced Segments feature, which filters report data of visitors based on their activity on the site. For example, an administrator could filter the data to display only new visitors to the site, or visitors who accessed the site through a mobile device. These segments can be chosen from a set of default segments based on

¹² Lamb, C. W., Hair, J. F., & McDaniel, C. (2012). *Marketing*. (5th ed., p.25). Mason, OH: South Western, Cengage.

common website user segments, or be customized based on administrator-defined dimensions and metrics. Analytics can display up to four of these segments simultaneously, visually describing multiple demographics at once across the same period of time: for example, with the “Mobile Traffic” and “New Visitor” Advanced Segments enabled on Oglethorpe’s Summer website Analytics, we can see that between March 22nd and May 11th, 2013 that 74.58% of visitors were new and 22.6% of visitors accessed the site from a mobile device. We can also see that 74.4% of those mobile visitors were visiting that site for the first time.¹³ These segment filters carry over to all of the reports Analytics offers in their left sidebar, so it is easy to find out how many visitors of a demographic accessed the site from a particular location, were referred to the site through an outside source, or navigated to a specific page on the site.

Another feature Google Analytics offers its users is the Goals function. Goals track how many visitors achieve a particular administrator-defined benchmark on their site. For instance, with Oglethorpe’s summer page, University Communications wanted to be able to track the number of visitors that accessed OASIS, a website which allows enrolled students to register online for classes. To gather this statistic, they set up Analytics to track whenever a visitor leaves the website through an outbound link and store the title and URL of the link’s destination when that event occurs. Next, they created a Goal which tracks the events which triggered whenever a visitor clicked a link to the OASIS page. From there, Google aggregates data about the visitors which triggered those events and displays them in the Goals report panel. In this report, University Communications can see the number and percentage of visitors who accessed OASIS through links on the site, as well as the pages from which visitors accessed the link and the sources from where these visitors entered the summer website. This data tells them how effective

¹³ Appendix: *Exhibit 3. Audience Overview w/ Advanced Segments “All Visits”, “New Visitors”, and “Mobile Traffic” enabled.*

these links have been in getting visitors to enroll in classes through OASIS: for instance, we can see that the OASIS link on the Courses Offered page is far more popular than the link on the Apply Now page (222 vs. 7 between March 22nd and May 11th, 2013).¹⁴ These Goals can also be assigned a monetary value to be tracked: for example, if a website was asking for a donation, they could create a Goal which collected the number of times visitors access a page that appears after a visitor completes the donation transaction, so they can track the number of visitors which make a donation as well as the amount of money that has been donated in a particular period. With Goals, Analytics users can track a wide variety of benchmarks which indicate the effectiveness of a website in generating desired results out of visitors.

By creating Analytics, Google has assumed part of the data gathering burden, offering statistics generated by their sophisticated web technologies to website owners for free. Analytics can determine the popularity of a website, and segment visitors according to factors relating to their demographic, behavior, technology used, and more. Todd Bennett proclaims that “for savvy marketers with a strong understanding of marketing research and testing, analytics has leveled the playing field and allows marketers to make more intelligent decisions about what works and what doesn’t work and allocate their limited dollars and resources to those strategies that provide the greatest return on investment.”¹⁵ Small business owners now have access to more accurate data about consumer behavior which traditionally could only be gathered by directly polling the target market or by attempting to discreetly observe them in a physical environment, which have proved to be costly to execute and produce inconsistent results. While these new techniques give these businesses the tools to make more intelligent decisions in respect to their target market, they still need to think critically about the consumer and be able to derive statistical data which

¹⁴ Appendix: *Exhibit 4. Goals Overview of outbound traffic to OASIS.*

¹⁵ Bennett, Todd (2013, May 10). Email interview.

contributes directly towards producing results for the business. By devoting resources previously spent on data collecting towards understanding how to interpret analytics data properly and applying it to their marketing strategy, business are more empowered than ever to produce products which connect with the modern consumer and provide satisfaction based on their natural wants and needs, courtesy of Google and data analytics.

Appendix

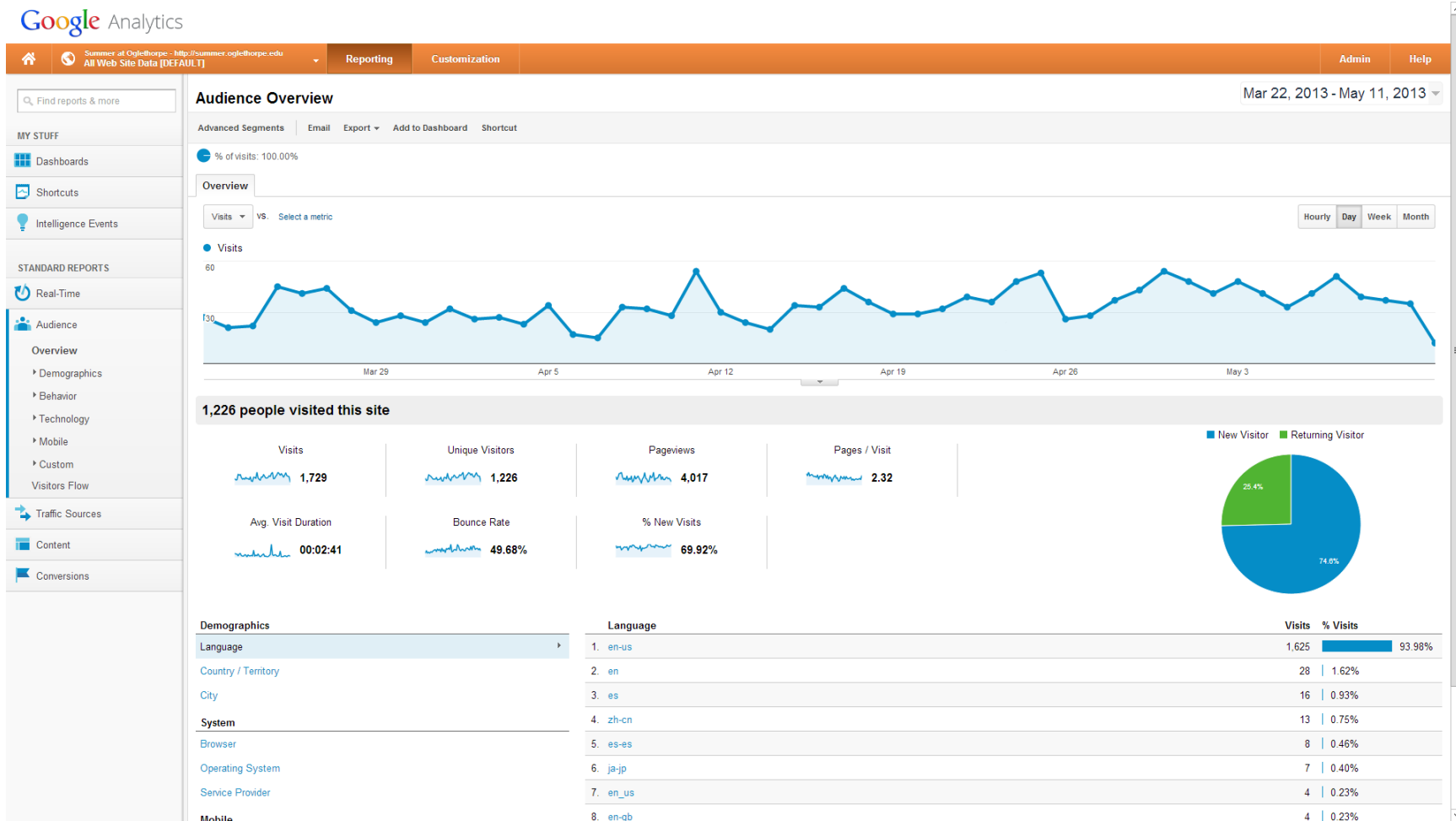


Exhibit 1. Google Analytics for Oglethorpe’s summer site: Audience Overview

Appendix

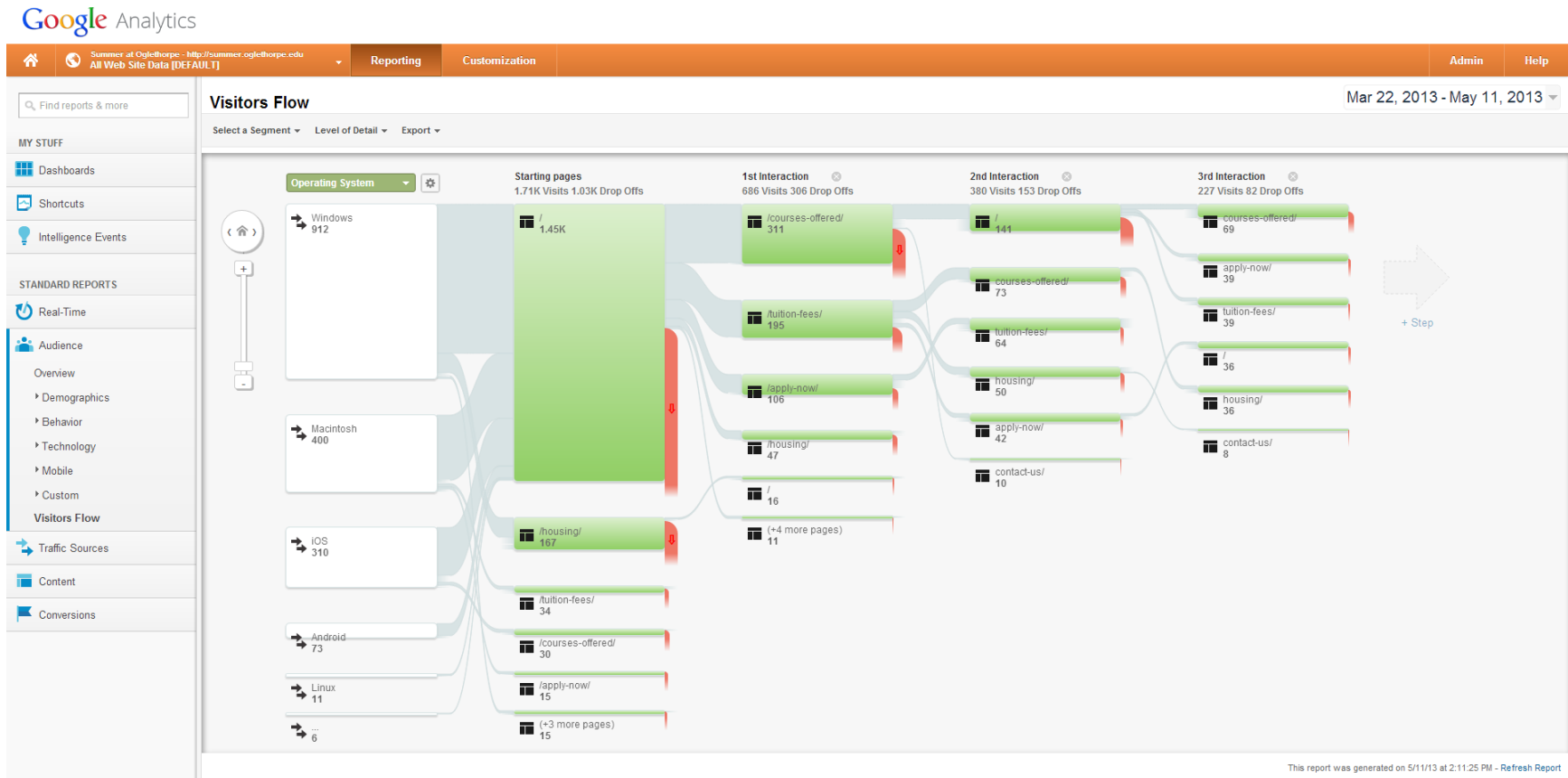


Exhibit 2. Visitors Flow according to Operating System

Appendix

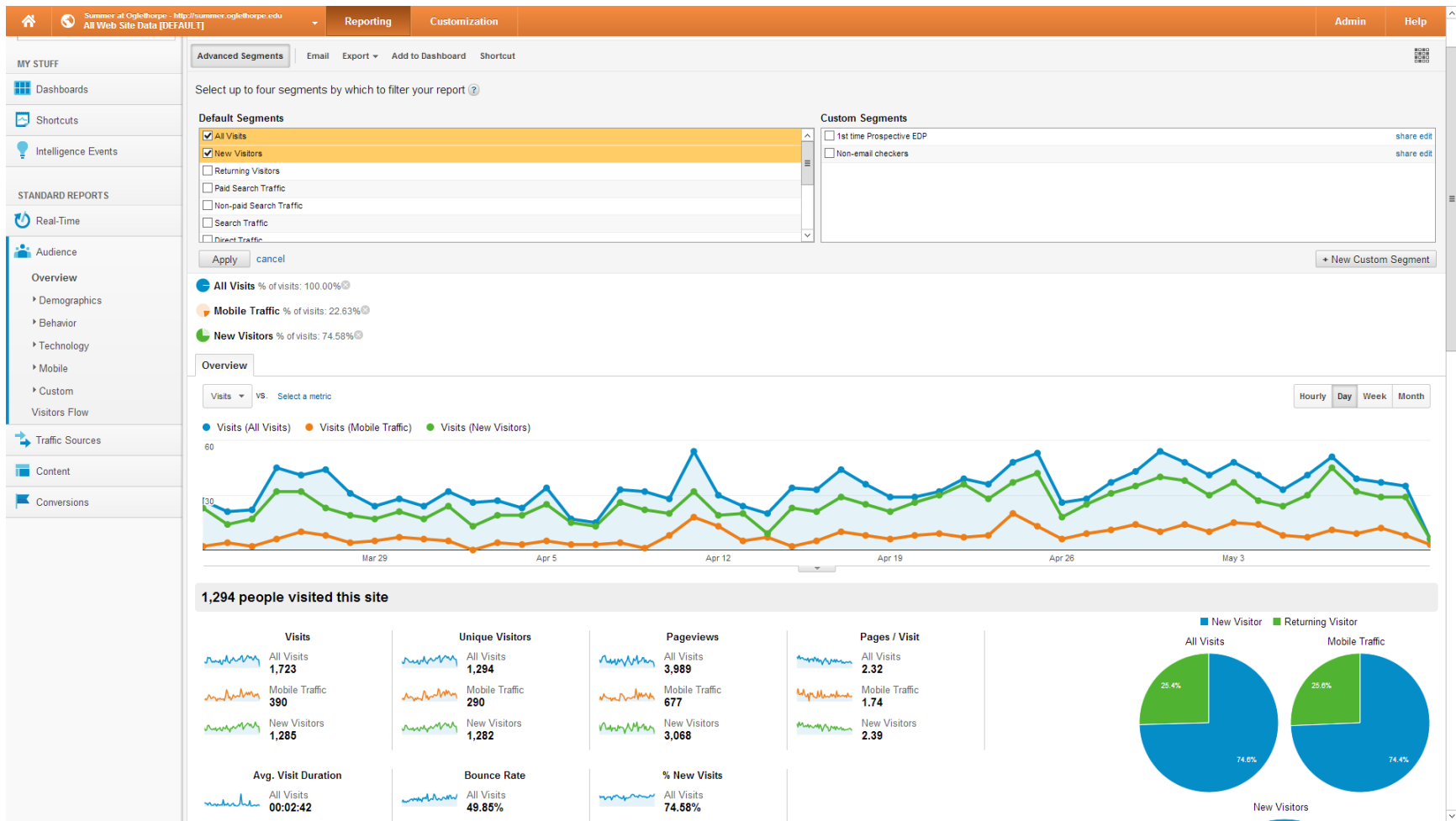


Exhibit 3. Audience Overview w/ Advanced Segments “All Visits”, “New Visitors”, and “Mobile Traffic” enabled

Appendix

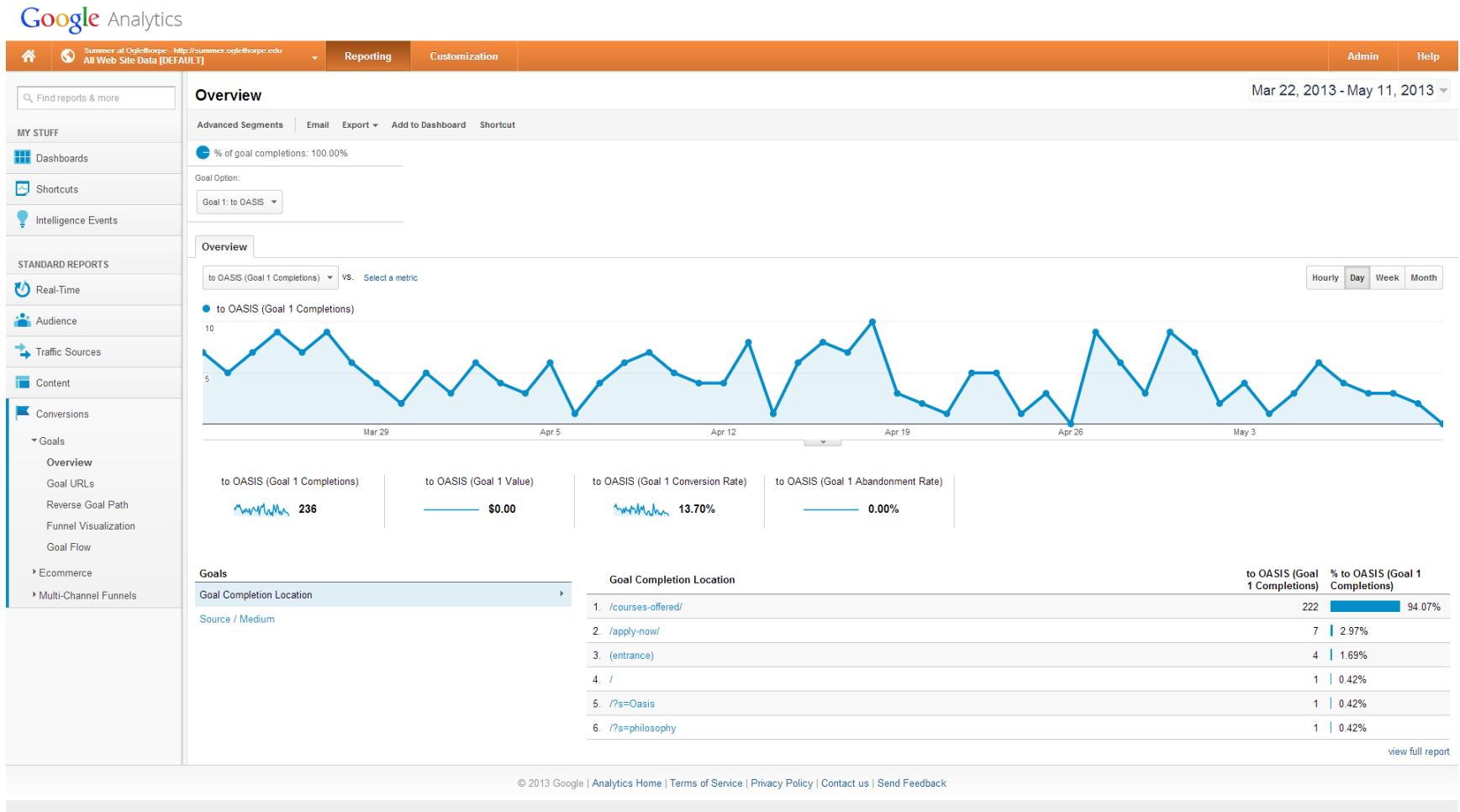


Exhibit 4. Goals Overview of outbound traffic to OASIS.