

Segmentation

INTRODUCTION

Your users most likely come to your website with a variety of goals, different ways of expressing information through various means like organic search or clicking on a link on another website, and have different ways of exploring and navigating websites. Even if you have a website that has just one kind of user it targets, other people will still find their way to your website. Some of the most exciting analyses you can do involve segmenting your web analytics data.

Segmentation is the filtering of data according to metrics and dimensions so you can just analyze specific users, the ones you care about. By now, you have already seen basic segmentation according to dimension in action. For example, the “Mobile Overview” report in Google Analytics divides users according to whether or not they accessed your website with a mobile device, and shows website usage metrics for the segment of users who use mobile devices and those who use laptops and desktops. The “All Traffic” report divides users according to what source and/or medium brought them to the website.

So far, we have dealt with basic segmentation where we have used one or two dimensions to segment metrics data. This chapter covers the creation of your own, more complex segments. Complex segments involve setting up one or more filters on practically any dimension or metric available in web analytics, and then your web analytics tool goes through each visit to the website that it measured and filters out all of the data from every visit that don’t fit the criteria that you specify. You can match the value of dimensions, or filter, according to whether a metric is greater than, less than, or equal to a value you specify for any given visitor. You can then explore any of the analytics reports, seeing only this segment of data.

WHY SEGMENT DATA?

Let’s go back to [AwesomePetToys.com](#). Their website gets visited by their target users, pet owners with an unusually strong attachment to their pets, as

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Table 9.1 Bounce Rate Data for AwesomePetToys.com

	Number of People Who Bounced	Total Number of People	Bounce Rate
People who arrived on the website accidentally	4,000	5,000	80%
A secondary kind of user	1,800	2,500	72%
Target users	500	2,500	20%
Total	6,300	10,000	63%

well as less-wealthy pet owners and people who accidentally reached their website or who explored it and decided that buying pet toys online wasn't for them. On top of that, [AwesomePetToys.com](#) also has a secondary target, pet boarding services that buy bulk orders of toys and other accessories. When one looks at their web analytics data, all these people are grouped together.

That means, for example, if [AwesomePetToys.com](#) had an overall bounce rate of 63% in August 2012, that bounce rate could include the data shown in Table 9.1.

As you can see, the 63% bounce rate masks a huge difference between the bounce rate for AwesomePetToys.com's target users and the large number of people who weren't their target users. This level of segmentation is not something you would get through any default reporting; rather, it requires understanding the web analytics data you have available and making choices about the metrics and dimensions to sufficiently differentiate your groups of users.

You segment data so you can see and analyze data for just that segment of visits instead of all visits within a given time period. For example, [Figure 9.1](#) shows data from the "All Pages" report in Google Analytics, showing data for all users. [Figure 9.2](#) shows the same report, but after a segment has been applied to show only users who used a mobile device. Note that the metrics have changed considerably.

You explore other reports and the data in them will also reflect the segmentation. It is also possible to show data from different segments side by side—[Figure 9.3](#) combines both the data from all users with the mobile devices segment, from [Figures 9.1](#) and [9.2](#), respectively.

After a short how-to guide to segmentation in Google Analytics, this chapter will cover a few of the most useful ways to segment data to answer UX questions.

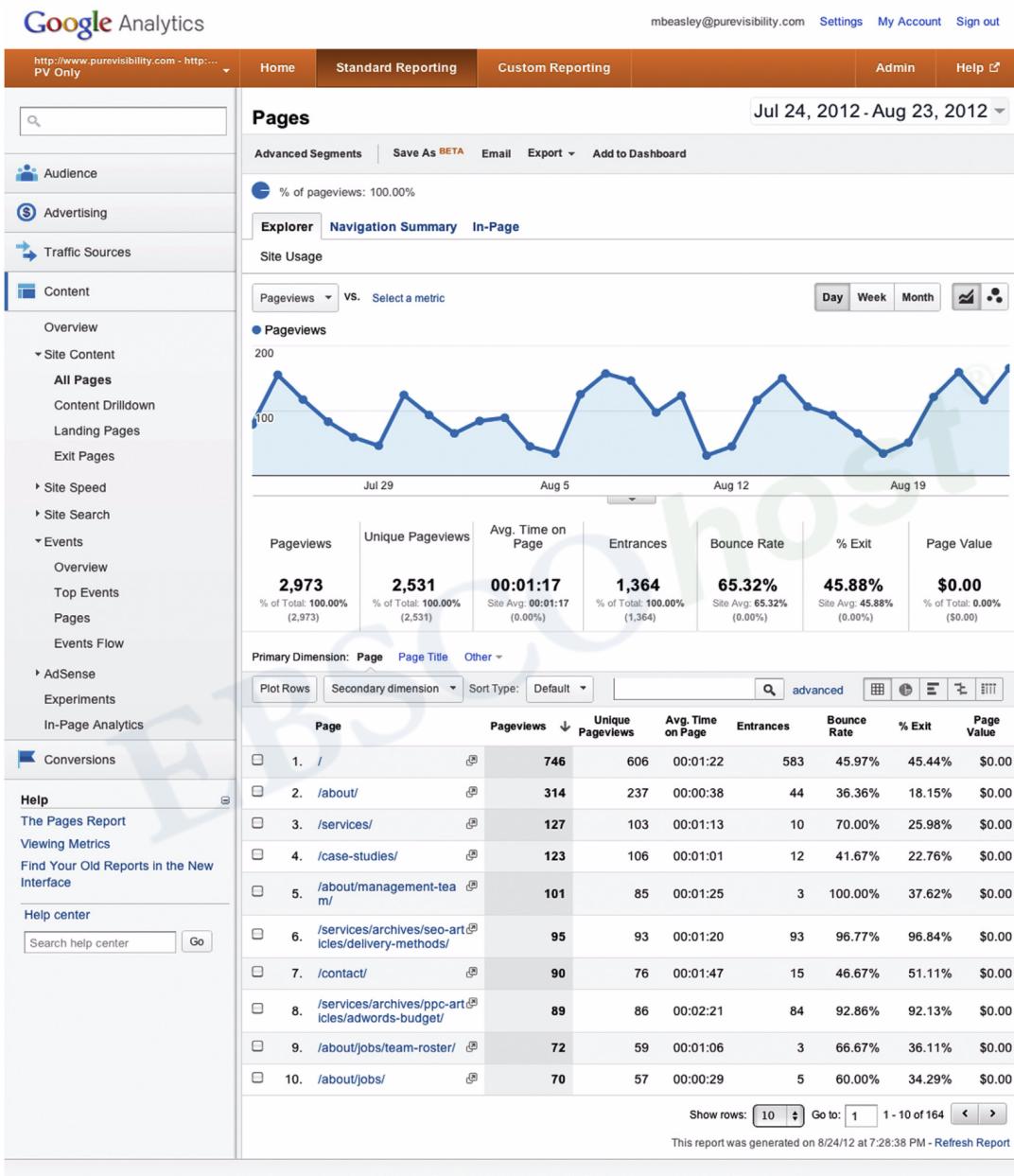
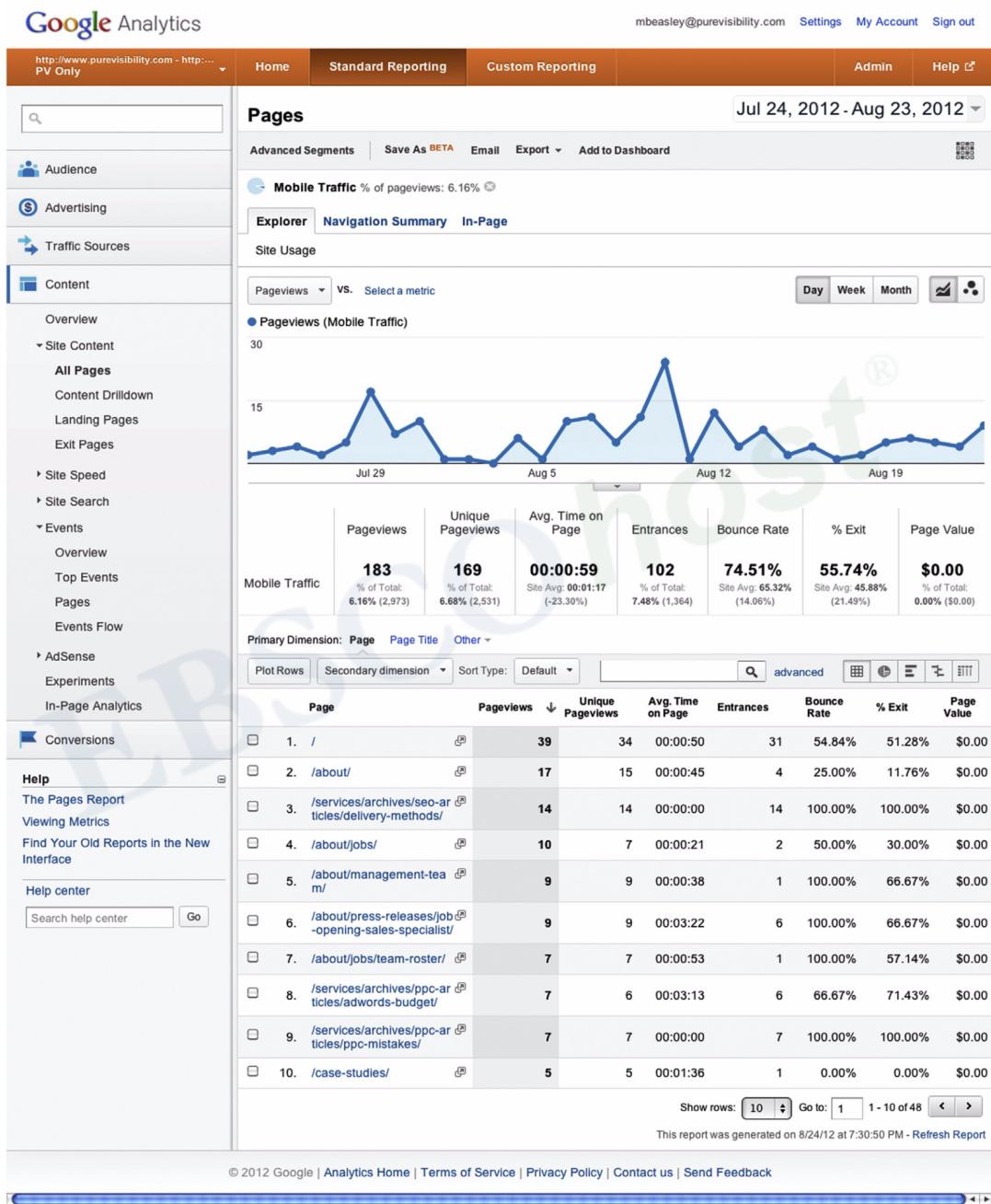
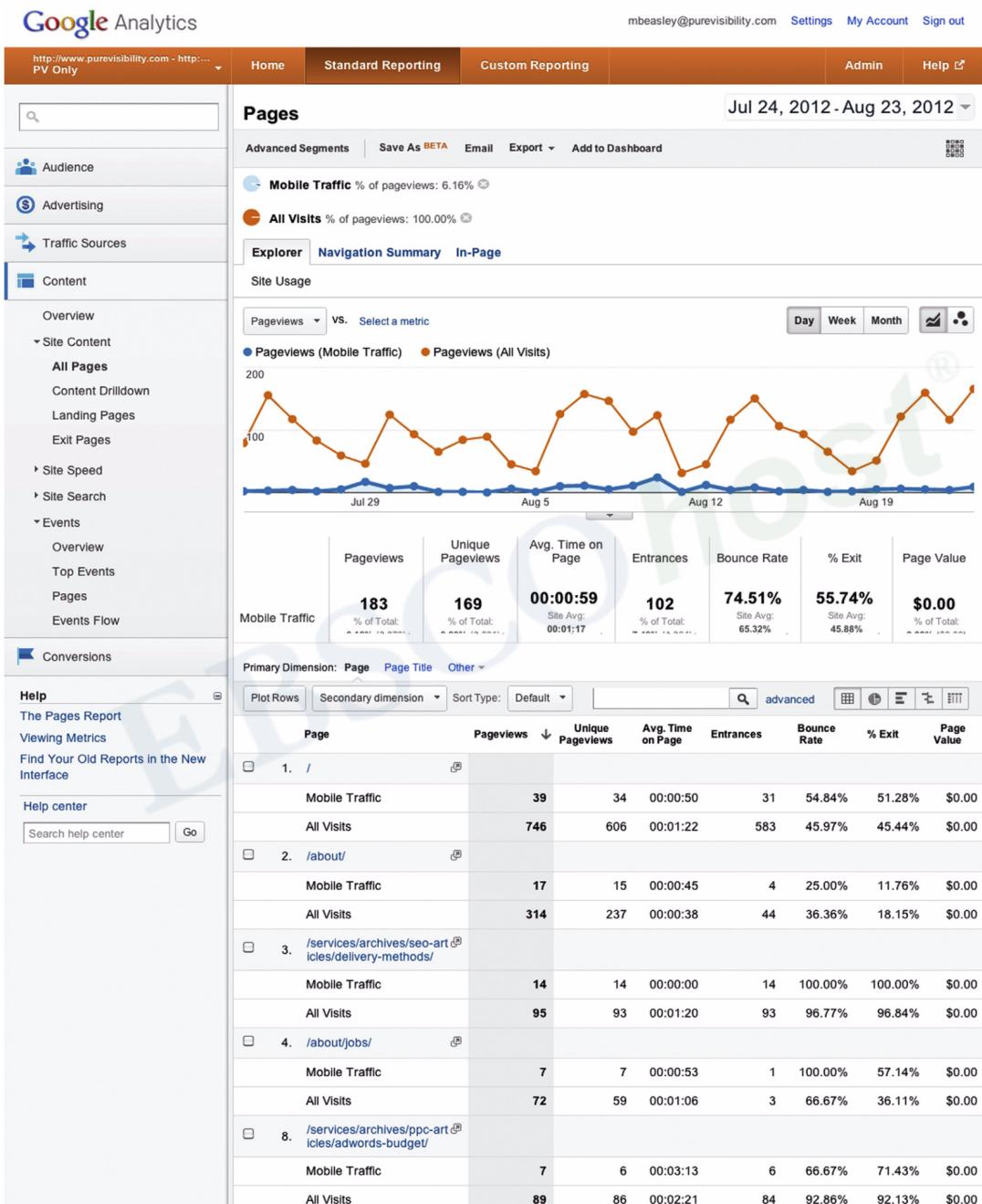


FIGURE 9.1

The “All Pages” report from Google Analytics, with no segmentation applied.

**FIGURE 9.2**

The same report in Figure 9.1, but showing only data for users who used mobile devices.

**FIGURE 9.3**

Both data from all users and the mobile devices segment, side by side in the same report.



FIGURE 9.3 (Continued)

HOW TO SEGMENT DATA

Recall the general analysis process:

1. Pose the question.
2. Gather data.
3. Transform data.
4. Analyze.
5. Answer the question.

Segmentation is a way of transforming data within your analytics tool to make them better suited to answering the question you have posed.

When you have a question you wish to answer with web analytics data, consider:

1. What are the ways I can tell the relevant users from the irrelevant users?
2. How do these factors translate to metrics and dimensions that web analytics tools measure?

This is the intellectual work in segmentation. After these steps, all that's left is manipulating your web analytics tool.

Let's look at the [AwesomePetToys.com](#) example. After considerable research, they develop personas to describe their primary user, secondary user, and their anti-user (the pet owner who just doesn't have the disposable income to spend on expensive pet toys). Their primary user, Emily, is described in this way:

It's early Saturday afternoon, and Emily is settling down on the porch swing on her east-facing porch to relax for a while with a cup of herbal tea. It's easy to let the house go during the week, when she works at the main branch of the library, and Saturday mornings usually bring with

them a flurry of chores that Emily shares with her partner, Christina. Emily looks through the window into her living room and sees one of their cats, Toonces, and remembers that she has meant to buy a new ToyCo laser pointer, their last one having been lost in the recent move to this house after years of excellent service.

Emily is never far from the Internet, though, and she opens the cover on her new iPad, opens Chrome, and searches for “ToyCo laser pointer.”

On the Google search results page, she sees, among other results, both an ad for [AwesomePetToys.com](#) as well as an organic listing. Emily clicks on the organic listing and arrives at the ToyCo laser pointer product page.

There are elements of this story that can be used for segmentation:

- Time of day (the hour dimension in Google Analytics)
- Browser (the browser dimension)
- Device (the mobile device model dimension)
- Keyword (the keyword dimension) and which search engine Emily used (the source dimension)
- Landing page (the landing page dimension)

This persona was packed with a rich level of detail, meant to help the entire design team at [AwesomePetToys.com](#) imagine their target user, Emily. The downside of segmenting at this specificity level is that the number of users who actually meet all of these criteria *may* only constitute a tiny portion of [AwesomePetToys.com](#)'s users—maybe 10 out of the 6,300 visits.

While the specificity of a persona can be useful for helping people empathize with what is realistic, it can cause you to leave out data from users who are also the right kind of user, but who didn't follow the narrative in your persona. Is it possible to generalize some aspects of the persona, leave out elements that are too specific, or to go back to the research on various real users who went into the persona to find traits you can filter for?

In the case of [AwesomePetToys.com](#), time of day, keyword, and landing page may simply be too specific for the purposes of segmentation. The time of day was intended to add detail to Emily's story, but early afternoon is not the only time that the people fitting the primary persona use the website. On the other hand, Emily shopped on the weekend, which could be a useful way to differentiate users. [AwesomePetToys.com](#) sells a wide variety of products and when users search for these products by brand name, it indicates that they are probably specifically seeking these high-end products. Building out a segment for [AwesomePetToys.com](#)'s primary persona should involve coming up with a longer list of search keywords for specific products (as well as, perhaps, people searching for “expensive pet toys” in general). Segmenting according to

the landing page as well as according to keyword is often redundant. As our hypothetical [AwesomePetToys.com](#) researcher widens the scope of keyword segmentation, it is safe to stop segmenting according to the landing page.

Although the browser may be too specific and not highly relevant to understanding Emily's behavior, the fact that she uses an iPad is probably a marker of having disposable income. However, iPad use among AwesomePetToys.com's target users may still be uncommon. If the research on AwesomePetToys.com's users showed that they were primarily Apple users, then it may make sense to filter according to the operating system (OS, where the dimension is either Macintosh or iOS). Looking at the user research may also show that the user's device wasn't enough of a defining trait to be useful and should therefore not be used for segmentation.

Finally, research may have uncovered other ways to identify users like Emily who didn't make it into her persona, like clicking on a link on a website that caters to the interests of pet owners with disposable income to spend on their pets.

So far, we have discussed segmentation as a way of identifying users according to their traits or how they got to the website. It is also possible to segment according to users' behavior on your website, something we will cover in this chapter.

After you have identified ways to distinguish the users you are interested in from the rest of your analytics data, it is time to actually build the segment.

Google Analytics' Advanced Segments

If you're using Google Analytics, you can very easily make up your segment as you go and iterate quickly. Let's make a segment that includes AwesomePetToys.com's primary persona, Emily, as well as other relevant users who don't fit that exact story.

1. In Google Analytics, you can access advanced segments by clicking the Advanced Segments button near the top of almost every report ([Figure 9.4](#)). Clicking this button shows a list of prebuilt segments as well as the list of all of the segments you've segmented.
2. There is a button in the lower-left corner of the list of the segments you've built, + New Custom Segment. This button brings up the form where you actually build the segment ([Figure 9.5](#)).
3. First, you should give your segment a name. You will probably create a great deal of segments over time and never have time to curate your collection, so try to be descriptive and succinct. We can use "Primary Persona—Emily."
4. Next, it's time to start adding filters. You will start with "Include Ad Content Containing" and then a blank text field.
 - You can change "include" to "exclude."

The screenshot shows the Google Analytics interface. At the top, there's a navigation bar with links for 'Old version', 'mbeasley@purevisibility.com', 'Settings', 'My Account', and 'Sign out'. Below the navigation bar is a search bar and a user menu with 'Admin' and 'Help' options. The main content area is titled 'Overview' and includes a section for 'Advanced Segments'. A red arrow points to the 'Advanced Segments' button. Other visible elements include a date range selector ('Feb 25, 2012 - Mar 28, 2012'), a goal completion chart, and a sidebar with links for Audience, Advertising, Traffic Sources, Content, and Conversions.

FIGURE 9.4

The Advanced Segments button in Google Analytics—where to get started with segmentation.

This screenshot shows the 'Advanced Segments' creation form. At the top, there are buttons for 'Advanced Segments', 'Email BETA', 'Export', and 'Add to Dashboard'. Below that is a 'Name:' input field. The main area contains a configuration interface with sections for 'Include' (set to 'Ad Content'), 'Containing' (with a dropdown and input field), and 'or' (with a dropdown and input field). There are also buttons for 'Add 'OR' statement' and 'Add 'AND' statement'. At the bottom, there are buttons for 'Save Segment', 'Preview Segment', 'Test Segment', and 'Cancel'.

FIGURE 9.5

The form in Google Analytics where you can create segments.

- Click on “Ad Content” to change this field to another metric or dimension.
 - Change the method of matching.
 - Enter what you’d like to match.
5. At this point, you can click on “Add ‘OR’ statement” or “Add ‘AND’ statement” to continue building your segment, and repeat step 4 as many times as you need. **Figure 9.6** shows the “Primary Persona—Emily” segment with several filters entered.
 6. You have three options after you’re done adding filters:
 - The Save Segment button saves the segment, takes you away from this form, and applies the segment to your data.

The screenshot shows a user interface for creating a segment named "Primary Persona - Emily". The interface includes a toolbar with "Advanced Segments", "Save As BETA", "Customize", "Email", "Export", and "Add to Dashboard". The main area displays a series of logical operators ("and", "or") and filter criteria. The first section, enclosed in a large "and" block, contains two "Operating System" filters: one for "iOS" and another for "Macintosh". Below this is a link to "Add 'OR' statement". The second section, also enclosed in an "and" block, contains three "Keyword" filters: "ToyCo Laser Pointer", "Dogfun Squeaky Steak", and "HighClassPets.com". Below this is another link to "Add 'OR' statement". At the bottom of the interface are buttons for "Save Segment", "Preview Segment", "Test Segment", and "Cancel".

FIGURE 9.6

One possible approach to the Emily persona segment. The OS for the device she uses to access [AwesomePetToys.com](#) is specified as created by Apple, indicating her high amount of disposable income, and then a set of keywords and a referring website that show her goal to be the purchase of expensive pet toys. In the real world, this segment would contain a more expansive set of keywords and referring websites.

- The Preview Segment button keeps the form open, but applies it to your data. This can be incredibly useful for experimentation or addressing one-off questions.
 - The Test Segment button runs all of the filters and tells you how many users each filter captures. Doing so can be useful for troubleshooting.
7. After you have either saved or previewed the segment, you can begin to explore the reports in Google Analytics with data segmented.

Under “More Options” you also have the choice of applying your segment to all profiles that you have access to, or choosing specific profiles. This feature can be useful if you work with multiple clients or have multiple profiles since it will make it easier to sort through your list of segments if you only see ones that are relevant to the profile you’re looking at.

WHAT ARE THE WAYS YOU CAN SEGMENT DATA?

You can segment data according to almost any metric or dimension that appears in your web analytics tool, in a combination of AND and OR statements. This section explores some of these ways.

AND, OR, and Sequence of Filters

Segmentation often involves combining two or more filters. You join these segments in two ways:

1. With an AND statement, meaning *both* conditions *must* be true.
2. With an OR statement, meaning *only one* of the conditions *must* be true.

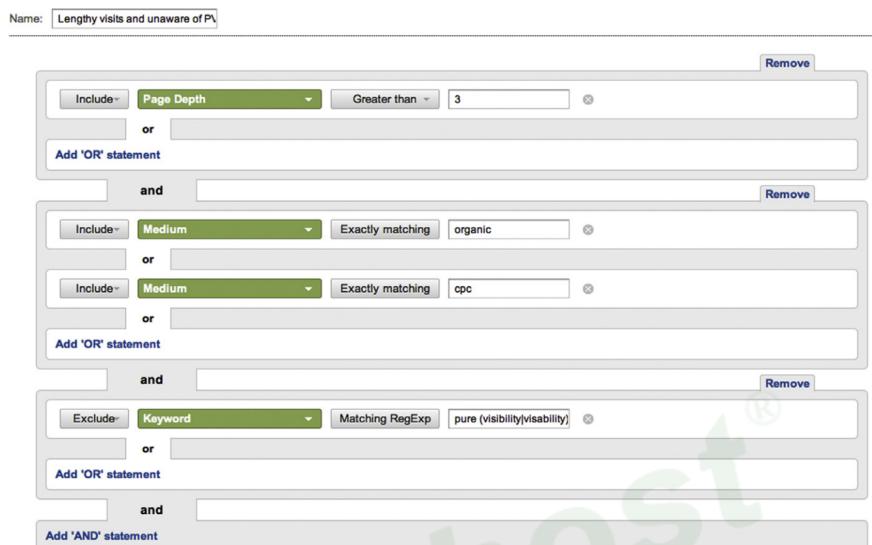
In [Figure 9.2](#), a screenshot from Google Analytics, there are four filters to segment the people who got to the Pure Visibility website through a search engine, by searching for something other than the name of the company, and who visited more than three pages during their visit—users who probably were not previously aware of Pure Visibility and are now possibly interested in its services (at least interested enough to not leave after looking at a couple of pages). This segment provides a nonexhaustive look at people who reached Pure Visibility while researching online marketing, although it’s worth noting that it casts a wide net; not only does it capture people searching for “online marketing,” but also five people who searched for “amazing birthday cakes.”

In Google Analytics, each step of the filtering process either includes or excludes visitors according to whatever metrics or dimensions you choose ([Figure 9.7](#)). *Include* means that visitor data are shown when you use the segment. *Exclude* means that all of the data from visitors are left out when you use the segment.

This advanced segment’s filters are grouped into three clumps: one that handles page depth AND another that handles keywords AND another that specifies that the users came in through either organic search OR paid search. These filters are not sequential; changing the order won’t change your results.

Metrics

You segment metrics according to a numeric threshold. In Google Analytics, you have the option to filter according to whether a metric has a value greater

**FIGURE 9.7**

An example of an advanced segment in Google Analytics, using filters joined by AND and OR.

Table 9.2 Sample Metric Filters in Google Analytics

Exclude Visit Duration Less than 60	Shows no data for any visits that lasted fewer than 60 seconds.
Include Product Revenue Greater than 20	Shows only data for visits where users bought more than \$20 of products (not including tax and shipping).
Include New Visits Equals 0	Shows only data for users who have visited the website before. New visits have the value 1 and returning visits are 0.
Exclude Goal 1 Completions Equals 1	Filters out any data for users who completed goal 1.

than, less than, or equal to whatever number you specify. Table 9.2 shows some examples.

Dimensions

Dimensions have text values and therefore you have different options for filtering them. In Google Analytics, you get the filters shown in Table 9.3. Some examples are shown in Table 9.4.

Table 9.3 Filter Options for Dimensions

Exactly matching	Only values that are completely identical to what you enter, with no additional characters.
Matching RegExp	If you know how to use regular expressions (and if you want to analyze search queries, regular expressions will be essential) you can use this option.
Begins with	Looks for values that start with what you enter.
Ends with	Looks for values that end with what you enter.
Containing	Looks for values that have the exact string you enter somewhere in the this field.

Table 9.4 Sample Dimension Filters in Google Analytics

Include Country/Territory Exactly matching “USA”	If you want to, for example, see only visitors who are in the United States, this would be the way to do it.
Include Medium Exactly matching “organic”	To filter users according to whether they followed a link from another website, used a search engine, clicked on an ad in a search engine, or directly typed the name of your website.
Include Mobile Exactly matching “yes”	Shows only data for users who came to your website using a mobile device.
Exclude Keyword MatchingRegExp “pure (visibility visibility)”	This simple regular expression would filter out most of the people who went to the search engine of their choice and typed in the name “Pure Visibility” as well as a common misspelling. This filter could be useful if you don’t want to see data for people who already know about Pure Visibility (admittedly, such a filter is of limited value if you don’t actually work for Pure Visibility).

USEFUL WAYS TO SEGMENT FOR UX QUESTIONS

Segmenting According to a Page

Segmenting users according to whether or not they visited a particular page during their visit is a useful technique for studying how a page may have affected user behavior. You can’t use analytics to directly answer a question like “Did this page make it more likely that people bought something?” because the answer relies on learning about people’s motivations. What you can do, however, is find out how people who visited (or didn’t visit) a particular page behaved. That means you can answer questions like:

- Were the people who visited the About Us page more likely to convert than the people who didn’t visit this page?
- Did the people who visited the amenities page have a higher conversion rate than the people who visited the floor plan page?
- How many people visited both the SEO section of my website AND the UX section of my website?

- What else were the people interested in super laser pointers also interested in looking at?

The mechanism here is simple—you choose a page, and the segment either includes users who went to that page sometime during their visit to the website, or you exclude users who went to that page sometime during their visit to the website. Of course, you could specify multiple pages with AND or OR relationships. You can even specify whether the page was the landing or exit page, but you otherwise can't explicitly filter according to when they visited a page during their visit.

In Google Analytics, you specify either the dimension page, landing page, or exit page. You can also select the matching option that best fits your needs—“Exactly matching” is best suited to situations where you have a specific page in mind, but you may want to match a class of pages with similar URLs.

Example 1

Let's go back to [AwesomePetToys.com](#). It is an e-commerce website and part of the process of purchasing standards is entering payment information. This page of the shopping cart has the following URL: /cgi-bin/billing.tmlp.

If [AwesomePetToys.com](#) made design changes to this part of the shopping cart, they'd want to see if it increased sales. To assess the effectiveness of the changes, the only people who [AwesomePetToys.com](#) cares about are the ones who actually saw this page and not all of the people who clicked around the website but didn't proceed to the checkout. They would build the segment in Figure 9.8.

They would then compare the time period to the time period before the change to see if more users make it from this page to the next page in the checkout process.

Example 2

In 2012, one of Pure Visibility's clients, Learning Care Group (LCG), replaced several of the pages on their five websites. LCG is a provider of childcare in the United States, with almost 1,000 centers across the country. Each center has its own page on LCG's website, each using the same design template. This template was the one that was redesigned in 2012.

LCG wanted to know, quite reasonably, if the new pages were better at enticing users to contact them and schedule a tour of their local childcare center than the old pages. Every center's page used the following format:

- /our-schools/austin-tx-7529
- /our-schools/riverside-ca-7191

The screenshot shows the Google Analytics segment builder interface. A dropdown menu is open, with 'Page' selected. Below it, there's a 'Matching RegExp' input field containing the regular expression '/cgi-bin/billing.tmpl'. To the right of this field is an 'Exactly matching' button. Below the main input field is an 'or' button, followed by an empty input field. At the bottom of the segment builder are three buttons: 'Add 'OR' statement', 'and', and 'Add 'AND' statement'.

FIGURE 9.8

Segmenting according to whether users viewed a page during their visit.

This screenshot shows the same segment builder interface as Figure 9.8, but with a different regular expression. The 'Page' dropdown is still selected. The 'Matching RegExp' input field now contains the regular expression 'our-schools/[0-9]{4}'. The rest of the interface, including the 'or' button, empty input field, and bottom buttons, remains the same.

FIGURE 9.9

The advanced segment that filters out any visits where the user didn't reach the childcare center pages at some point.

and so on. The only visits we wanted to analyze were the people who actually visited these center pages, so we used a segment like the one shown in Figure 9.9.

It uses the page dimension—that means Google Analytics will go through all visits for the selected time period and show only the ones where the user viewed this page at some point. This filter looks for pages that match the regular expression—that is, pages in the "/our-schools/" directory and having a four-digit number in the URL.

It was then just a matter of looking at the conversion rate (i.e., what portion of users contacted LCG to schedule a tour) before and after the pages changed. The good news was that the new pages worked very well! Obviously, tying the improvement in conversion rate to the new pages was an inference, but a reasonable one.

PAGE AND TIME ON PAGE

You can use the ability to segment according to whether or not a user visited a page as a rough proxy for whether the user was interested in the content on that page. The obvious problem with that assumption is that it will not be true that every user who reaches a page was actually interested in it. Unfortunately, Google Analytics can't segment according to whether users spent more than a certain amount of time on a page. Use this approach with care.

Table 9.5 User Traits Translated into Metrics and Dimensions

How frequently users come to your website	Count of visits, days since last visit, hour, visitor type
Where users come from, geographically speaking	City, continent, country/territory, language, region, subcontinent region
Information need	Keyword, page, search term
Where users come from on the Internet	Source, medium, referral path
Technological aspects of the user	Browser, browser version, connection speed, domain, flash version, Java support, mobile, operating system, OS version

Segmenting According to User Traits

As discussed earlier in this chapter, if you have found aspects of your personas that map well to analytics dimensions and metrics, you can create a segment that captures these users so you can eliminate the noise from users who don't match your profile. There isn't really a specific task that follows from creating this kind of segment; rather, it sets you up to explore the data and help answer a variety of questions more accurately.

Some dimensions and metrics that you may find useful are shown in [Table 9.5](#).

Segmenting According to Information Need

By now, we've discussed how you can learn about users through the search keywords that bring them to your website or the search terms they use in your website search. You were able to look at user behavior at a high level (average time on website, bounce rate, etc.) in these reports, but with segmentation, you can do a deeper analysis of what users do on your website based on what they searched for.

To segment according to information need, you simply create a segment with filters for the keywords in one of the categories you discovered. Let's go back to the example from Chapter 6, the Pure Visibility website. One of the categories was "Branded," or people who searched for Pure Visibility by name. Creating a segment that included only users who searched for Pure Visibility by name would simply be a matter of listing some common variations on the name, as shown in [Figure 9.10](#).

Another category was "PPC services" (pay-per-click [advertising] services). This category has a more diverse set of keywords, but many of the keywords are variations on:

- Pay-per-click company
- Pay-per-click business
- Adwords company

The screenshot shows a user interface for creating search filters. At the top, there's a section for an 'OR' statement with two entries: 'Include Keyword Matching RegExp ppc|cpc|pay per click|cost' and 'Include Keyword Matching RegExp adwords'. Below this is a large 'and' operator. Underneath the 'and' operator, there are two more sections: one for 'company|companies' and another for 'business', both using a 'Containing' operator. There are 'Add 'OR' statement' and 'Add 'AND' statement' buttons at the bottom of each main section.

FIGURE 9.10

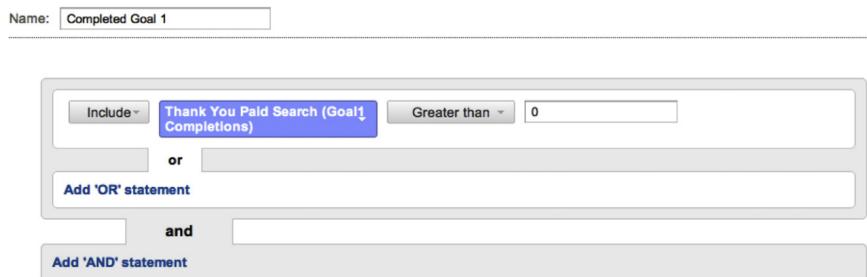
The segment of users who searched for pay-per-click services. Due to how small the text fields are, these filters are built less efficiently than they could be.

The important elements are a variation on the name of the service, combined with “company,” “business,” or some other word for business. A segment that isolates these users could take the form of [Figure 9.10](#). In the figure, we have a cluster of keywords describing the service, and a cluster of keywords describing the business.

With trial and error, iteration, and creativity, you can make your segment more precise. Create filters, apply them, and then explore how many and what keywords you have captured. Are you missing keywords from your segment that you know are relevant? Alternatively, you could build a segment that *excludes* the keywords you want to capture, and then see what remains—are there any keywords that you can add to your segment?

You have to strike a balance on how comprehensive you want to be. Looking at the “PPC services” category, do we also want to capture people who searched for “online marketing pay per click,” “adwords management Indianapolis,” “p.p.c. management marketing,” and so on? The more variations you want to include in your segment, the more effort it will take to create your segment, particularly if it’s a keyword with a lot of ways to misspell it.

Put simply, you can trade effort to get accuracy—the question is just how much extra accuracy will you get for your trouble. This book does not have a specific method for determining that point; unscientifically, roughly 80–90% coverage of visits that could fit within a keyword category will probably be a point with diminishing returns on accuracy.

**FIGURE 9.11**

An advanced segment that will show only users who completed goal 1; that is, who filled out a form on the Pure Visibility website.

You also don't have to do an exhaustive search query analysis before building this kind of segment. The main disadvantage of skipping the effort is that you will not have a good idea of exactly how many visits fall within a category of searches. You can still gain valuable insights, though, from just creating a segment that captures the few, most common keywords, particularly if you are looking at trends over time.

Whether or Not Users Completed a Goal

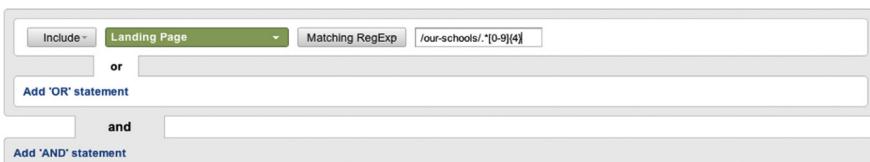
If you've gone to the trouble of setting up goals on your website (and it would be a good idea to do so), you may want to analyze the behavior of the people who actually completed one of those goals (perhaps in comparison to users who did not complete a goal). There is even a default "Advanced Segment" report in Google Analytics that will let you just see data for users who completed any kind of goal (the "Visits with Conversions" advanced segment). You can also go down to the level of the individual goal, which is relevant if you have more than one goal set up for your website.

In Google Analytics, you simply specify a goal and whether the user didn't complete it (0) or completed it (1), as shown in Figure 9.11. Selecting 0 or 1 is a very engineerish way to express this concept. You can put in numbers greater than 1, but it simply won't match anything.

You might create this segment to explore the behavior of people who converted—what pages did they visit and spend the most time on, where did they enter the website, what keywords did they search for in search engines or on your website's search functionality, and so on.

What Pages Users Landed On

You could segment users according to what page of your website they landed on (i.e., the first page of your website that they saw) to explore the behavior of the users who came to your website with a specific interest.

**FIGURE 9.12**

The segment capturing only users who landed on one of the childcare center pages, as opposed to simply encountering it any time during their visit.

The ability to segment according to the landing page is useful for answering very narrow questions. Typically, you would only do a segment by landing page if you wanted to find out how well a landing page serves users: Does it do a good job of providing immediate benefit to users and entice them to take some sort of action (e.g., buying something or exploring the website further)? Otherwise, you would be better off segmenting in a different way that captures more users. Recall the example from earlier in this chapter, one of Pure Visibility's clients, LCG.

Besides simply wanting to know how the pages for these childcare centers affected whether or not users contacted LCG to schedule a tour, these pages were also important for SEO and paid-search advertising, as a place where we tried to get users to land. What did these users do on the website after they landed on these pages?

Instead of creating a segment that looked for any visit where the user viewed a page matching "/our-schools/.{0-9}{4}" at some point, we instead used the landing page dimension, as in Figure 9.12.

What Pages Users Viewed/Didn't View

Whether or not a user viewed a page, while not perfect, is still a way of differentiating users based on what they want to do on your website. Emily is interested in shopping for cat toys. We can create a segment that includes users who, at some point during their visit, viewed a product page in the cat toys section of the website. [AwesomePetToys.com](#) has toys for other kinds of pets, a section of the website for selling toys in bulk to other businesses, a careers section on the website, and so on. It is possible to create a segment that includes only users who viewed a cat toy product page and did not view any pages in these irrelevant sections of the website. This segmentation will obviously exclude some users who just accidentally find their way onto the irrelevant pages, but if there are enough data to work with, then it's worth it.

This kind of segment is much like the landing page segment described in the last section, except instead of the landing page dimension, you would use the page or page title dimension.

CUSTOM VARIABLES

So far in this book, we have discussed what are for the most part universal metrics and dimensions that you will find, one way or another, in any web analytics tool. Now picture these scenarios:

- AwesomePetToys.com has users who browse the website anonymously, and users who log in to their account. How can they segment these two kinds of users?
- In a similar vein, it would be useful to be able to tell users who bought something in the past from those who didn't—this won't necessarily be the same division as logged-in versus not-logged-in.
- Better yet, AwesomePetToys.com's CRM system may store demographic data that analytics would not normally know about, like gender, purchasing habits, or specifics of their pet ownership. Segmenting according to persona would get even more powerful with access to these data.
- Searching for products can be as simple as typing a word into a search box, but it can be a complicated affair with filters on price, manufacturer, and more. None of these advanced features show up in the URL. What if the people at [AwesomePetToys.com](#) want to get a better understanding of how people use search?

Google Analytics and Omniture allow you to define additional dimensions that you can fill with practically any kind of data you want, such as the users' interaction with a page, their visit to the website, or about the users themselves (across multiple visits). The only limit is your programming ability, which is why this topic will have to remain largely outside the scope of this book. To expand the amount of data you can access in web analytics, you should talk to your IT department or a developer about what is possible with your organization's infrastructure and website.

THE TIP OF THE ICEBERG

This chapter has presented a small list of versatile tools. We have only scratched the surface of what is possible with segmentation. As with much of web analytics (and life), the best way to expand your knowledge is in reaction to real-world problems that you must solve.

KEY TAKEAWAYS

- Segmentation is the filtering of data according to metrics and dimensions so you can just analyze other users, the ones who you care about.
- You segment data so you can see and analyze data for just that segment of visits instead of all visits within a given time period.

- Some of the useful ways you can segment data are:
 - Whether or not users viewed a page during their visit.
 - According to user traits, such as mobile device use, geographic location, or data you feed into analytics through custom variables.
 - According to what users searched for to get to your website, or in website search.
 - Whether or not users completed a goal (e.g., buying something or filling out a form).
 - Where and/or how users entered your website, such as what page they landed on.

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