THE UNIVERSITY OF TEXAS AT DALLAS

Optimizing Competitive Edge

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JSOM 4.414

Example

- Texas Instrument (TI)

- There are small aspects of the site that might be business-to-customer, though 99 percent of the website is as business-to-business

- How would you measure the success of this B2B website?

Example

- From TI's potential Outcomes and Visitor behavior, we can come up with a sampling of metrics that it can use to measure success
  - Percentage of Visits that viewed the Product Folder directories
  - Percentage of selection and solution guide downloads
  - Number of free samples ordered
  - Number of new my.TI accounts opened
  - Usage of decision support tools

Source: Web Analytics 2.0 by Avinash Kaushik

Competitive Intelligence

- Competitive intelligence data can radically enhance your decision-making process:

  o you get additional context about your own performance,

  o you can mine industry trends for actionable insights,

  o you can finally understand your competition in the near-frictionless environment of the Web

Source: Web Analytics 2.0 by Avinash Kaushik

Competitive Intelligence

- Competitive intelligence (CI) is the analysis of data about your competitors, vertical markets, or the entire web ecosystem

- AMD, the microchip manufacturer, can use competitive intelligence data to understand how its direct competitor Intel performs

- How? – By measuring growth rates of visitor trends or identifying good sources of traffic for Intel and using that information to inform AMD's strategy

- Or assess other semiconductor manufacturers in their industry

Source: Web Analytics 2.0 by Avinash Kaushik

Competitive Intelligence - History

- For a long time, the only options for getting competitive intelligence on the Web were solutions such as Alexa (a toolbar), comScore (a panel), and Hitwise (an ISP)

- Alexa data was free, but the latter options were expensive, and hence data was inaccessible to many

- Now – a host of paid and free tools

- comScore, Google's Search Console Insights and Keyword Planner, single-purpose solutions such as Wordtracker and Quantcast

CI Data Sources, Types

- Analytics tool vs CI tools

- Access restrictions are different

- Data might not match but trends will

- Understand the CI tool

- Toolbar data, Panel data, ISP data, search engine data, benchmarks from vendors, self-reported data, hybrid data

Source: Web Analytics 2.0 by Avinash Kaushik

Toolbar Data

- Toolbars are add-ons that provide additional functionality to web browsers, such as easier access to news, search features, and security protections

- Google, MSN, Yahoo! and others

- Toolbars also collect limited information about the browsing behavior of the customers who use them, including the pages visited, the search terms used, perhaps even time spent on each page, and so forth

- Data is not personally identifiable information (PII)

Toolbar Data

- After the toolbars collect the data, your CI tool then preprocess the data before presenting it to you for analysis

- E. g., SimilarWeb provides traffic statistics (such as rank and page views), upstream (where your traffic comes from) and downstream (where people go after visiting your site) statistics, and keywords driving traffic to a site

  - Alexa used to be a popular toolbar extension that discontinued

Panel Data

- To gather panel data, a company may recruit participants to be in a panel

- Each panel member installs a piece of monitoring software

- The software collects all the panel's browsing behavior and reports it to the company running the panel

- Panel data is also collected when people unknowingly sometimes (user terms, etc.)

- One of the largest panels in the United States is run by comScore; its U.S. panel has 1 million visitors

ISP (Network) Data

- Our requests go through the servers of these ISP s to be stored in server log files

- The data collected by the ISP consists of elements that get passed around in URLs, such as sites, page names, keywords, and so on

- ISPs have a huge sample size

- Hitwise (now Connexity) relies on ISP has a sample size of 10 million people in the US and 25 million worldwide

- Reduced sample bias

Search Engine Data

- Search engines, such as Bing, Google, Yahoo!, and Baidu, log basic connectivity information such as IP address and browser version, etc.

- Google Ads

- Other Keyword Planner

Benchmarks from Vendors

- Web analytics vendors have lots of customers, which means they have lots of data

- Many vendors now aggregate this real customer data and present it in the form of benchmarks that you can use to index your own performance

- Benchmarking data providers – Semrush, Google Analytics, etc.

Source: Web Analytics 2.0 by Avinash Kaushik

Benchmarks from Vendors

- Semrush provides benchmarks related to Conversion Rates, Cart Abandonment, Time on Site, etc.

- Google Analytics provides benchmarks for Visits, Bounce Rates, Page Views, Time on Site, and Percent of New Visits

Source: Web Analytics 2.0 by Avinash Kaushik

Benchmarks from Vendors

Root domain ⌄   Root domain ⌄   Root domain ⌄   Root domain ⌄   Root domain ⌄

🔵 ebay.com ✕   🟢 etsy.com ✕   🟠 walmart.com ✕   🟣 shopzilla.com ✕   🟡 target.com ✕   **Compare**   Clear

Target	Visits	Unique Visitors	Pages / Visit	Avg. Visit Duration	Bounce Rate	
🔵 ebay.com	7B ↑5.88%	1.9B ↑3.42%	6.5 ↓11.43%	15:08 ↑1.11%	37.01% ↑8.76%	▬▬▬
🟢 etsy.com	3.5B ↓6.53%	1.3B ↓3.93%	4.8 ↓13.84%	13:29 ↑6.03%	43.07% ↑13.97%	▬▬▬
🟠 walmart.com	5.2B ↓12.03%	2B ↓6.25%	2.1 ↓42.28%	12:20 ↑17.09%	63.49% ↑37.87%	▬▬▬
🟣 shopzilla.com	403.1K ↑16.57%	269.9K ↑47.56%	4.6 ↓64.87%	08:49 ↓61.07%	30.7% ↑16.11%	▬▬▬
🟡 target.com	2B ↓20.19%	907.5M ↓18.96%	2.4 ↓12.59%	11:40 ↑12.18%	60.99% ↑11.42%	▬▬▬

Trend by Competitors   Last 3 months ⌄   Daily new ⌄   Growth ⌄   ⬆ Export

[Visits] Unique Visitors   Pages / Visit   Avg. Visit Duration   Bounce Rate

☑ ebay.com   ☑ etsy.com   ☑ walmart.com   ☑ shopzilla.com   ☑ target.com | 🔘 Deviation range

Source: https://www.semrush.com/kb/864-benchmarking-opportunities-for-growth
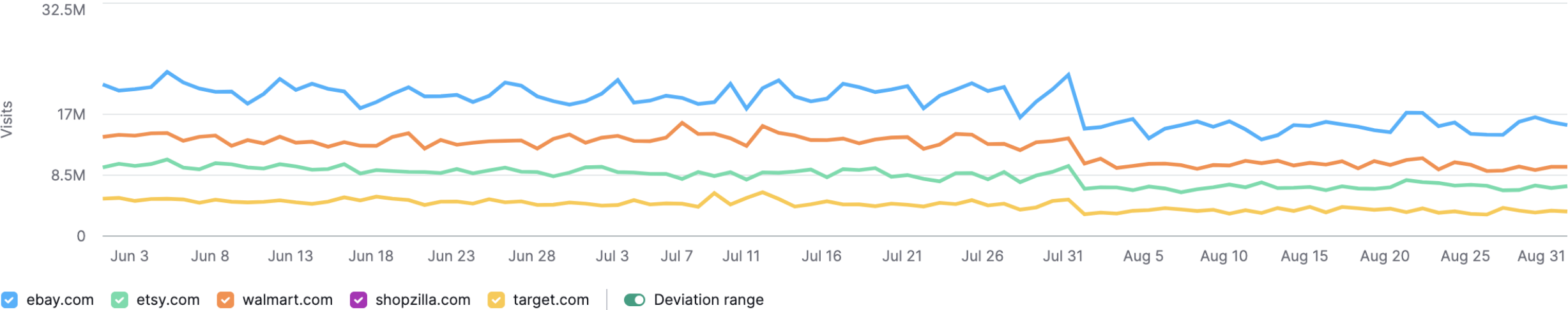
Keyword Gap

Database: 🇺🇸 United States ⌄   Device: 🖥 Desktop ⌄   Date: Aug 8, 2022 ⌄   Currency: USD

Root domain ⌄   Root domain ⌄   Root domain ⌄   Root domain ⌄   Root domain ⌄

| You | puma.com | ✕ | 🟢 nike.com | ✕ | 🟠 reebok.com | ✕ | 🟣 footlocker.com | ✕ | 🟡 adidas.com | ✕ | **Compare** | Cancel |

| Organic keywords | Paid keywords | PLA keywords | Select keyword type for each domain |

| Filter by keyword | 🔍 | | Position ⌄ | Volume ⌄ | KD ⌄ | Intent ⌄ | Advanced filters ⌄ |

Top Opportunities You

| Missing | Weak |

Keyword	Volume
nike outlet »	301,000
socks »	165,000
mens clothing »	110,000
nike socks »	110,000
sweatpants »	110,000

View details

Keyword Overlap

| ☑ puma.com	114.1K
☑ nike.com	1.4M
☑ reebok.com	246.8K
☑ footlocker.com	548.2K
☑ adidas.com	657.5K

Self-reported Data

- Why? Beneficial if you are an adv-revenue based company

- Quantcast report, the icon called Quantified indicates the report is showing data directly from the site

- Keyword Planner, the small bar graph icon next to certain metrics—such as Unique Visitors (cookies)—indicates data from the site

- Competitors sometimes publish their own data through vendors such as Google's Keyword Planner / Trends or Quantcast, then that is probably the cleanest and best source of data for you

Self-reported Data
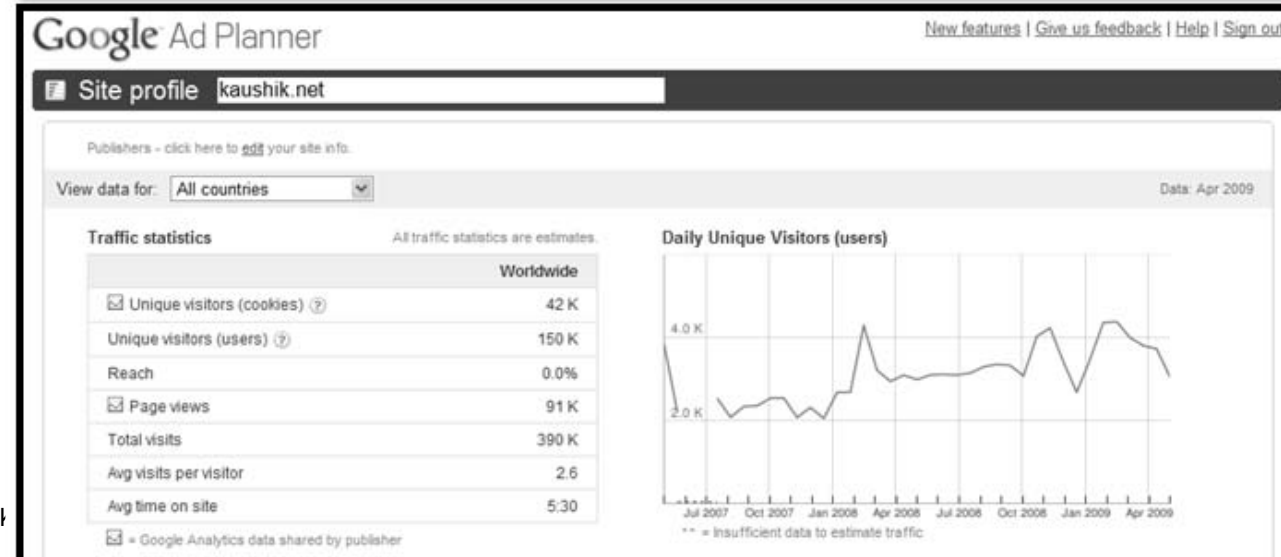
Hybrid Data

- Rather than using just one source for data, some vendors now use multiple sources to augment their data set

- Two ways to do that

- The first method is to append the data (from previous slide)

- The second way is many different sources, e. g., Compete

- Compete uses tools from panels, ISP s, their own toolbar, and data purchased from other application providers

- Google's Trends for Websites is another example of a hybrid source

Recommended Process

- A lot of data is available about your industry or your competitors that you can use to your benefit, but how to approach?

    1. Ensure that you understand exactly how the data is collected

    2. Understand both the sample size and sampling bias of the data reported to you (spend time on this)

    3. If steps 1 and 2 pass the test, use the data; if not, skip the data.

Website Traffic Analysis

- How many visits did my competitor get?

- To answer that - "How is my traffic doing compared to my competition?

- That is long term traffic trends

Source: Web Analytics 2.0 by Avinash Kaushik

Website Traffic Analysis

- Categories of website traffic analysis:
  - Comparing Long-Term Traffic Trends
  - Analyzing Competitive Sites Overlap and Opportunities
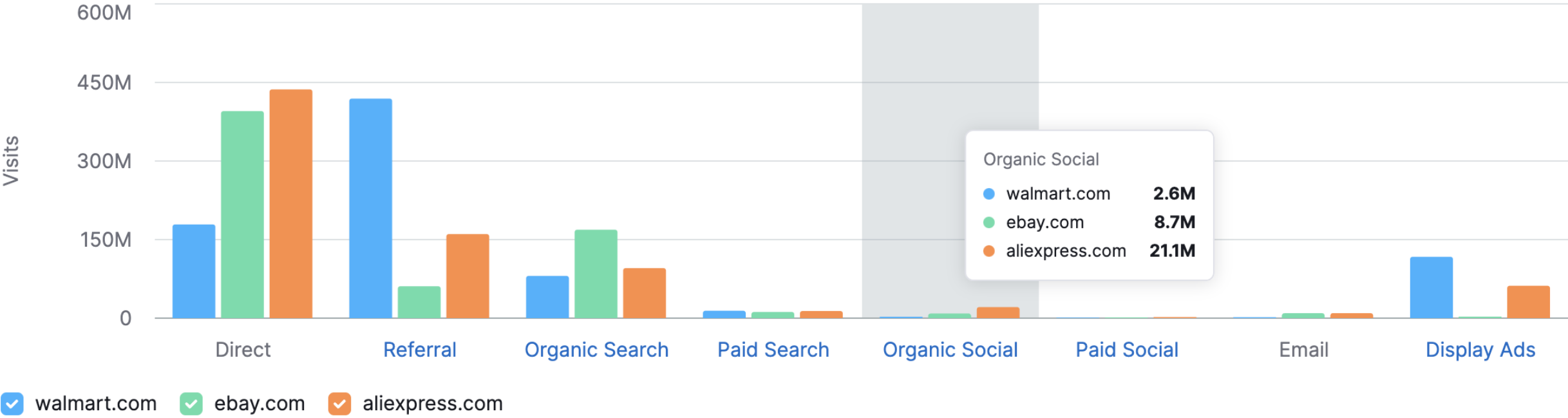 - Analyzing Referrals and Destinations

Source: Web Analytics 2.0 by Avinash Kaushik

Comparing Long-Term Traffic Trends
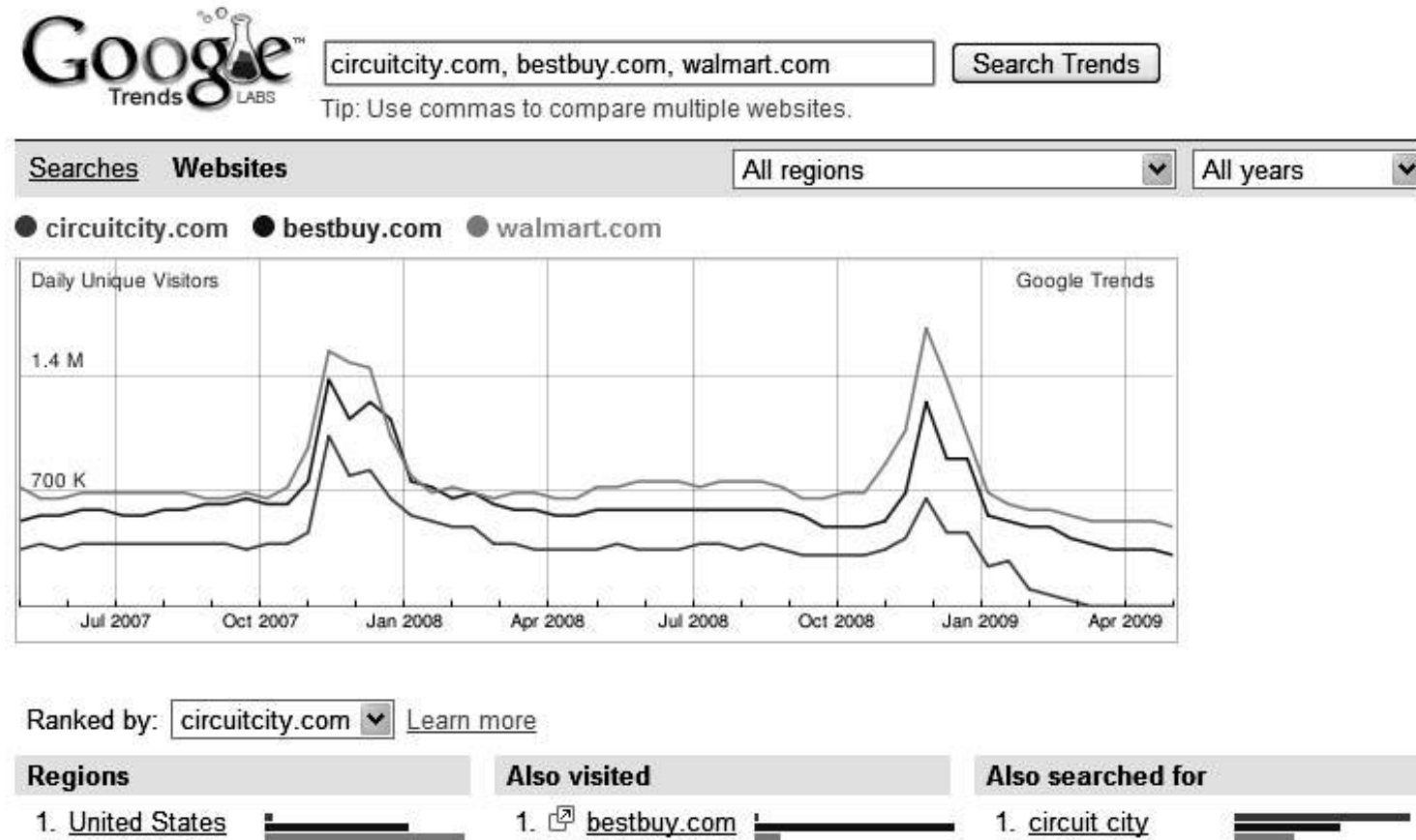
Comparing Long-Term Traffic Trends

Traffic Channels ⓘ

Growth `new` ⌄   ⬆ Export

🖵 All devices | Feb 2023

Organic Social

● walmart.com **2.6M**
● ebay.com **8.7M**
● aliexpress.com **21.1M**

| | Direct | Referral | Organic Search | Paid Search | Organic Social | Paid Social | Email | Display Ads |

☑ walmart.com   ☑ ebay.com   ☑ aliexpress.com

Source: https://www.semrush.com/kb/864-benchmarking-opportunities-for-growth

Comparison With Competitors ⓘ

| Audience | Activity | Engagement | | ☑ Facebook | ☑ Twitter | ☑ Instagram | ☑ LinkedIn | ☑ Pinterest |

Name	Total audience ⇅↑	Change ⇅↑	Growth ⇅↑	Total audience ⌄	
chanel.com	88,642,280	+495,810	+0.6%		👁
www.gucci.com You	77,370,255	+316,765	+0.4%		👁
dior.com	68,984,984	+577,826	+0.8%		👁

\+ **Add competitor**

Source: https://www.semrush.com/kb/864-benchmarking-opportunities-for-growth

Analyzing Competitive Sites Overlap and Opportunities

- The Also Visited data in Google Trends for Websites helps you recognize which sites are really your competition

- The metric shows which other sites Visitors to your site also visit

Analyzing Competitive Sites Overlap and Opportunities

Ranked by: homedepot.com ▾ Learn more

Also visited

1. ⬀ myhomedepotaccount.com
2. ⬀ vendaria.com
3. ⬀ lowes.com
4. ⬀ acehardware.com
5. ⬀ menards.com
6. ⬀ homedepotopinion.com
7. ⬀ acehardwaresuperstore.com
8. ⬀ sears.com
9. ⬀ northerntool.com
10. ⬀ hardwarestore.com

Ranked by: lowes.com ▾ Learn more

Also visited

1. ⬀ homedepot.com
2. ⬀ vendaria.com
3. ⬀ acehardware.com
4. ⬀ lowescreativeideas.com
5. ⬀ menards.com
6. ⬀ acehardwaresuperstore.com
7. ⬀ tractorsupply.com
8. ⬀ sears.com
9. ⬀ thisoldhouse.com
10. ⬀ askthebuilder.com

Source: Web Analytics 2.0 by Avinash Kaushik

Analyzing Competitive Sites Overlap and Opportunities

- For Lowe's, the number-one site its Visitors visited happens to be homedepot.com!

- Whereas Home Depot's biggest competitor comes in at 3

Source: Web Analytics 2.0 by Avinash Kaushik

Analyzing Referrals and Destinations

- What websites do people visit after they leave your site?

- The answer, as you saw earlier, can be critical

Source: Web Analytics 2.0 by Avinash Kaushik

Analyzing Referrals and Destinations (not in exam)

Analyzing Referrals and Destinations

- It is easy to see that B&H sells through www.amazon.com as well as its own site

- Looks like a good decision: Amazon is listed as the number-three referrer

- The report on the right shows the sites people visit after they leave B&H

- It is a bit surprising that Google refers 32.5 percent of the traffic to B&H

- If those people found what they were looking for at B&H, then 29.08 percent would not immediately go back to Google (presumably to search again)

- eBay – a concern

Source: Web Analytics 2.0 by Avinash Kaushik

Search and Keyword Analysis

- Search engines are the starting points for most people who use the Web
- Bing, Yahoo!, Google, are a vital part of every company's customer acquisition strategy
- Organic and paid search strategy
- CI tool vs Analytics tool (from the last class – both might help)

Source: Web Analytics 2.0 by Avinash Kaushik

Top Keywords Performance Trend

- Google Insights for Search or any other platform

- Enter desired search terms (keywords)

Source: Web Analytics 2.0 by Avinash Kaushik

Top Keywords Performance Trend
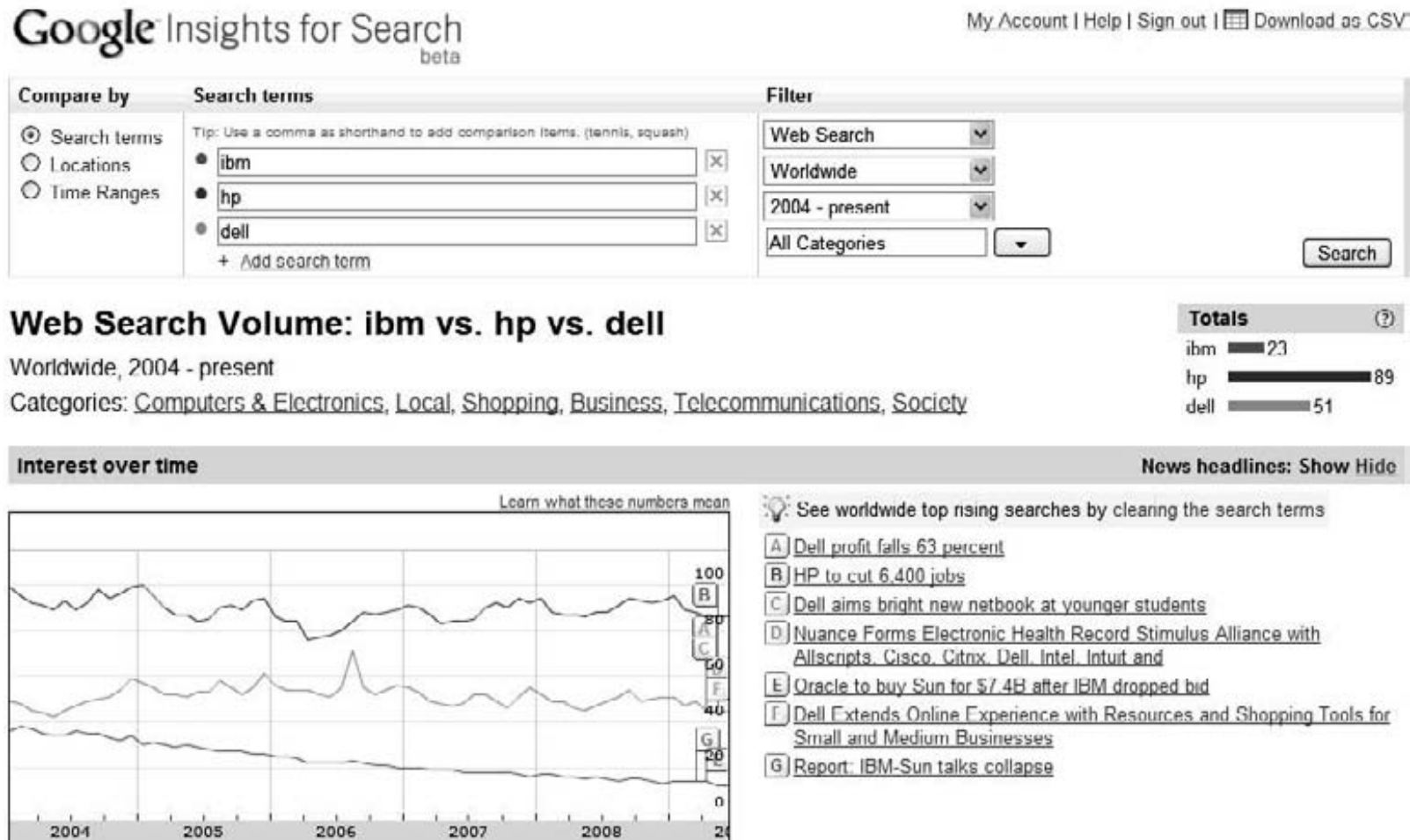
Top Keywords Performance Trend

- Can see that both HP and Dell held steady with consumer interest, even if they declined slightly in recent months
- The number of searches for IBM dropped steadily over the past four years
- Trend might be worrying for IBM, especially because IBM bought more magazine and TV advertising during that period

Top Keywords Performance Trend

Web Search Volume: pampers vs. huggies vs. diapers

United States, Last 12 months

Categories: Lifestyles, Shopping, Entertainment, Finance & Insurance, Local, Health

Totals ⑦
pampers ▬ 36
huggies ▬ 24
diapers ▬▬▬ 86

Interest over time   News headlines: Show Hide

Learn what these numbers mean
● 35 ● 41 ● 89 | May 17 - May 23, 2009
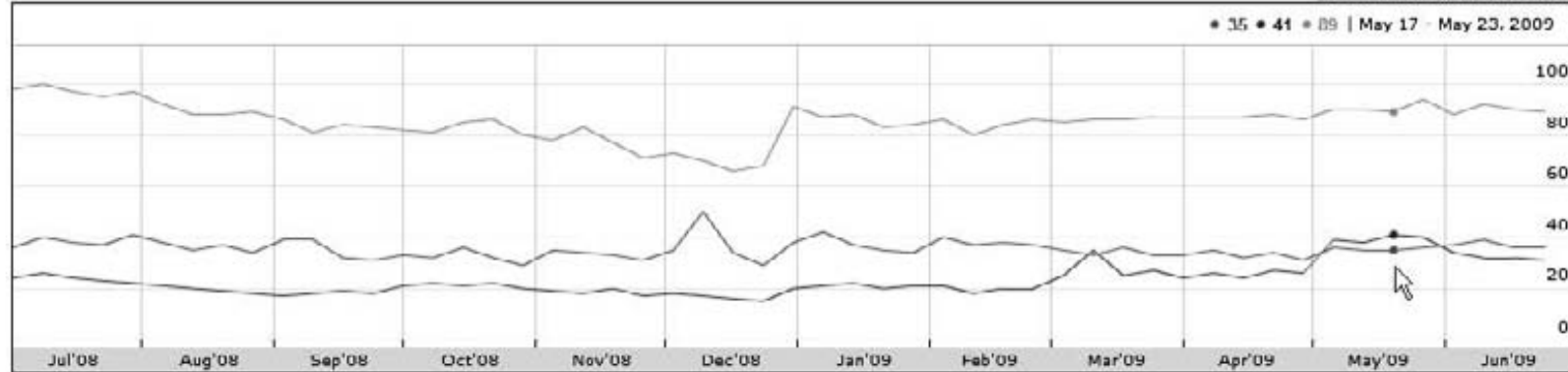
Top Keywords Performance Trend

- The performance of the entire diapers category – interest dropped dramatically through the peak of the recession—July to December 2008—and has since shown a nice gradual recovery

- The performance of the brand – Pampers has suffered somewhat less

- Possible promotions in early December yielded great results

- Performance of the competitor – Huggies has shown a very nice gain through end of Q1 2008 to the current period and in May 2008 overtook Pampers for the first time

Top Keywords Performance Trend

- It is easy to look at your own performance in a silo in your web analytics tool

- Analysis such as this, especially for your most important traffic terms, will help us understand the bigger ecosystem picture

- From which, we can take actions

Source: Web Analytics 2.0 by Avinash Kaushik

Geographic Interest and Opportunity Analysis

- One of the neatest features on all search engines is being able to target your advertising by geography

- Each company or brand has its areas of strength

- Why not take time to understand yours and figure out how to exploit opportunities

Geographic Interest and Opportunity Analysis

- We can use Google Insight (for map views) for search

- We continue with the last example to identify where opportunities exist for Pampers if it really wants to take down Huggies

- Search interest by region for Pampers – this report is by state, though we can narrow it to city level

Source: Web Analytics 2.0 by Avinash Kaushik

Geographic Interest and Opportunity Analysis
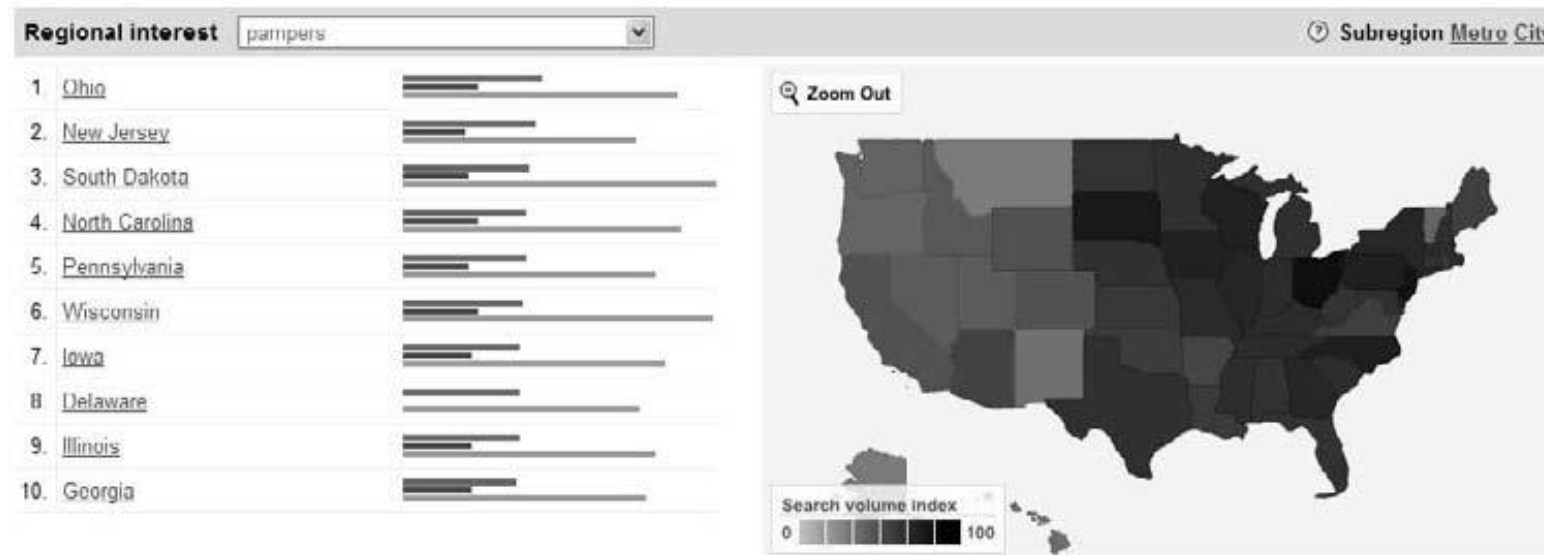
Geographic Interest and Opportunity Analysis

- What you see?

- States with big populations show up, such as Ohio and Pennsylvania

- It would be nice to have states such as California more interested in our brand

- How does our main competitor fare?

Source: Web Analytics 2.0 by Avinash Kaushik

Geographic Interest and Opportunity Analysis
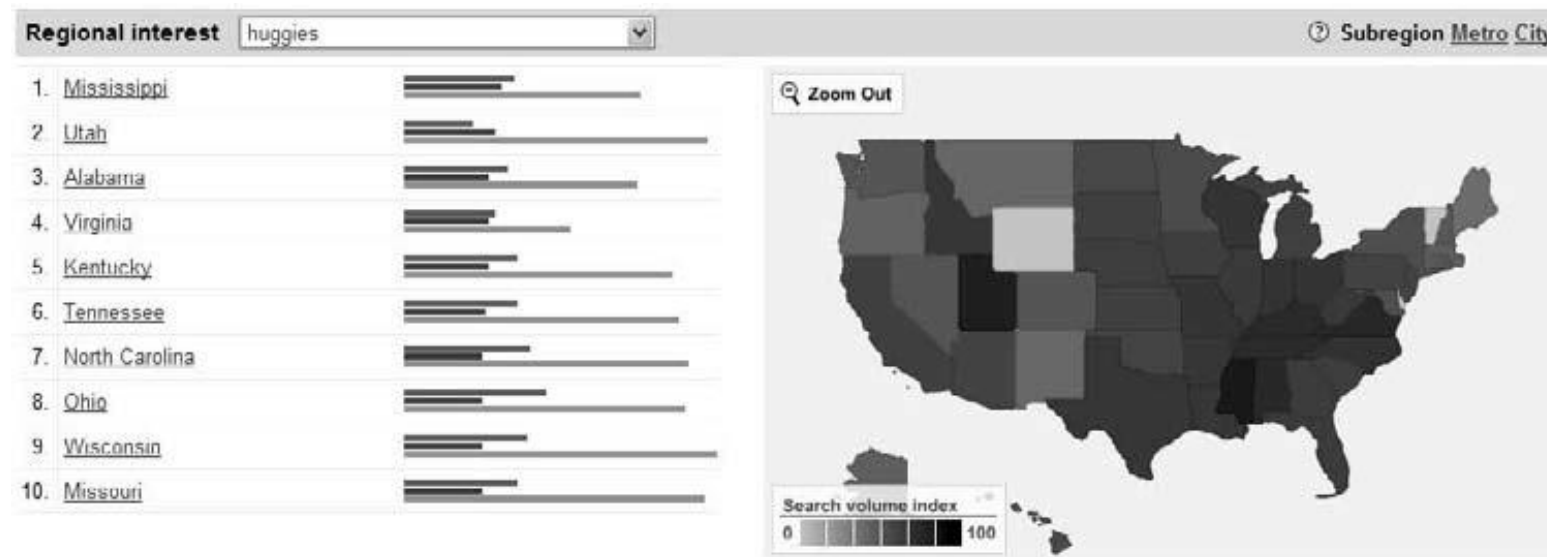
Geographic Interest and Opportunity Analysis

- We can consider competing with Huggies in their strongest states like Mississippi, Utah, Alabama, Virginia, and Kentucky

- Good thing – coincidentally, none of Huggies' strongest states show up in our top 10

- Identify areas of opportunity by doing a complete category analysis

- What happens for a generalized term – diapers?

Source: Web Analytics 2.0 by Avinash Kaushik

Geographic Interest and Opportunity Analysis

Geographic Interest and Opportunity Analysis

- Look at the top-ranked state, Wyoming

- It shows a huge interest in diapers – the intensity is searches for diapers relative to all searches

- Some interest in Pampers (the first line next to the name of the state above it), nonexistent interest in the Huggies brand

Geographic Interest and Opportunity Analysis

- Type of actions and decisions:

- Should you go after Alaska and Oregon more aggressively since there is so much interest in the category but not in you?

- Both are smaller states than New York and California, but they offer a nice way to grow sales

- Reduced attention from others and using the data intelligently help our company or business even better

Geographic Interest and Opportunity Analysis

- Geographic analysis can be used for offline marketing and advertising also

- Another example - real-world case, marketers used geographic interest analysis to determine the optimal marketing strategy for a Brad Pitt movie, first for the offline ads by city and state and then how to geographically best target online users across the world

Source: Web Analytics 2.0 by Avinash Kaushik

Geographic Interest and Opportunity Analysis

	State (51 returned)	Visits 05/23/2009		Visits 05/24/2008		Representation	
1	Texas	8.57%		7.77%		110	
2	California	7.35%		9.32%		79	
3	Florida	7.17%		6.55%		110	
4	New York	7.07%		7.20%		97	
5	Pennsylvania	6.20%		5.25%		110	
6	Ohio	3.95%		4.50%		88	
7	New Jersey	3.82%		3.41%		112	
8	Massachusetts	3.72%		2.96%		126	
9	Michigan	3.45%		3.89%		89	
10	Illinois	3.29%		3.13%		105	

Geographic Interest and Opportunity Analysis

- It is a simple matter of recognizing where interest was highest and promoting the new movie more heavily in those areas

- We can observe the states where brand interest improved and states where brand interest declined

- Google Insights for Search, the tool used in the previous example, will give you insights only into data from Google, obviously

Related and Fast-Rising Searches

- A strategy: constantly identifying related search terms and looking beyond the top 10 terms to find the fastest-rising search terms

- The former helps you expand your view of the world, while the latter ensures you are plugged into your customers' 'current' interests (likely what is to come next)

Related and Fast-Rising Searches

| Search terms | related to diapers | United States, Last 12 months |

Top searches			Rising searches	
1. cloth diapers		100	1. parents choice diapers	+60%
2. baby diapers		60	2. pampers diapers coupons	+60%
3. pampers		25	3. diapers.com	+60%
4. huggies diapers		25	4. parents choice	+50%
5. huggies		25	5. pampers coupons	+50%
6. pampers diapers		20	6. bumgenius	+50%
7. free diapers		20	7. white cloud diapers	+40%
8. disposable diapers		15	8. diapers coupons	+40%
9. diapers coupons		15	9. coupons for diapers	+40%
10. daily diapers		15	10. cheapest diapers	+40%

Related and Fast-Rising Searches

- Another practical example of using search data

- American Bridal

- To keep up with the latest trends in the industry, she needs to know what trends currently interest consumers

- She can use consumers; declared interests by looking at terms they typed into search engines

- Data from ISP

Related and Fast-Rising Searches

Top Wedding Search Terms

The following report shows **search terms** for the industry 'Lifestyle - Weddings', ranked by **Clicks** for the **4 weeks** ending **06/20/2009**.

Rank	Search Term	Clicks
1.	davids bridal	1.78%
2.	wedding dresses	1.51%
3.	bridal shower games	1.25%
4.	david's bridal	0.92%
5.	wedding invitations	0.70%
6.	wedding songs	0.61%
7.	alfred angelo	0.54%
8.	wedding cakes	0.52%
9.	wedding favors	0.41%
10.	wedding hairstyles	0.40%

Fast Moving Search Terms

The following report shows **search terms** for the industry 'Lifestyle - Weddings', ranked by **largest increase** for the **week** ending **06/20/2009**, compared with the **week** ending **06/13/2009**. (Filters applied)

| Rank	Search Term	Volume	Change
1.	questions to ask weddin...	1.07%	New
2.	paddle boat favors	0.49%	New
3.	maui-waterfalls-wedding	0.34%	New
4.	liquor wedding favors	0.33%	New
5.	burnt orange and chocol...	0.33%	New
6.	wedding cake toppers	0.33%	New
7.	davids bridal outlet	0.30%	New
8.	country wedding invitati...	0.28%	New
9.	womens evening or mot...	0.23%	New
10.	personalized wedding m...	0.23%	New

Share-of-Shelf Analysis

- Keywords report from analytics tool might have misleading data

- How? It shows numbers are rising of the keywords

- But is that rise to the right for 10 percent of the searchers, or is it for 90 percent?

- Need to pre-process

Share-of-Shelf Analysis

- How much share-of-shelf American Bridal gets for the keyword wedding favors

- Ranks 5 on the list, not bad – 3.12% share-of-shelf

- How important the term is for them; it accounts for 13.32 percent of her search traffic

Share-of-Shelf Analysis
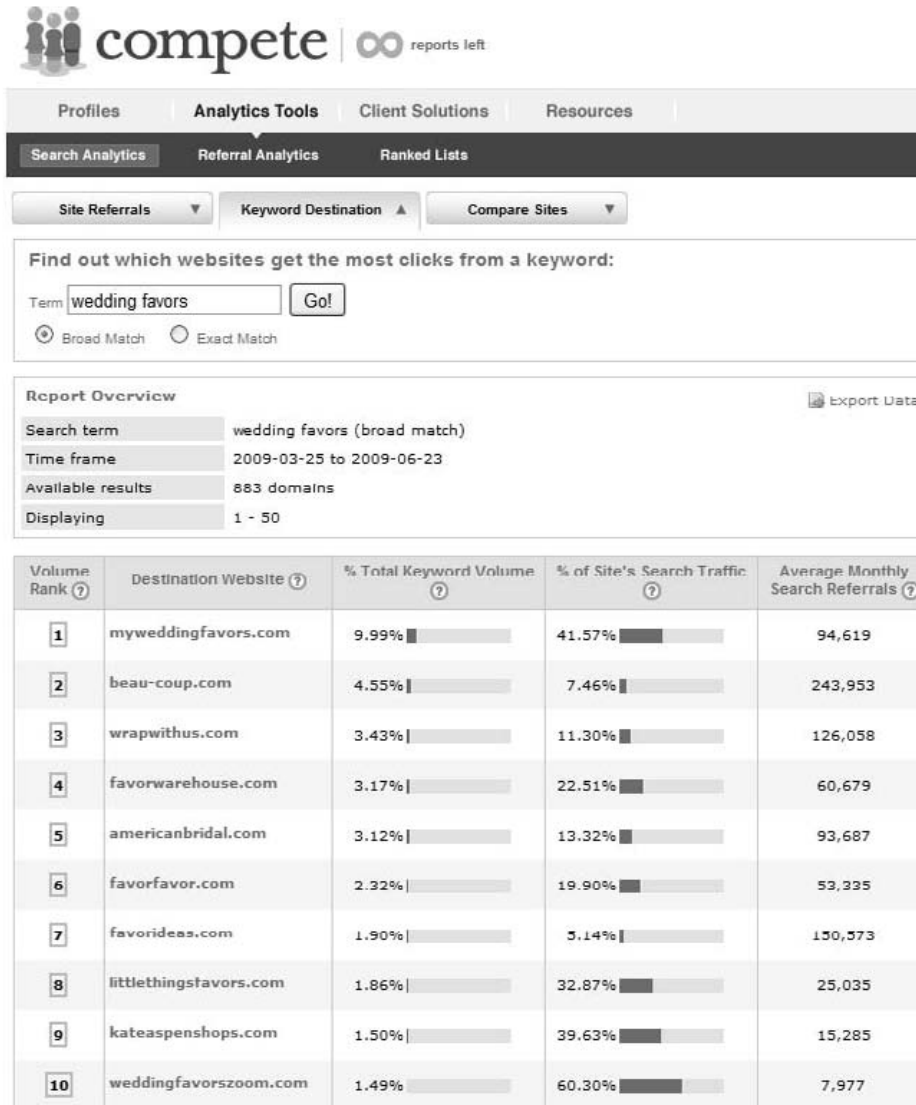
Share-of-Shelf Analysis

- P&G wants as many of its shampoos as possible on the shelves at Wal-Mart and Target

- The same should be true for you when people search—you want as much share of-shelf as you can of the available clicks for your category from the search engine

Keyword Expansion Analysis

- Keyword expansion is one of the most common types of competitive intelligence analysis in the search space

- Which keywords should you bid on?

- Google Ads Keyword

Keyword Expansion Analysis

- Example – want to participate in green energy by building a windfarm

- Which keyword I want to buy based on cost, competition, search volume, and the trend

- Ideally, this analysis will identify keywords with sufficient volume that trend in the right direction and yet are not too expensive, such as <u>wind power energy</u>

Keyword Expansion Analysis

	How would you like to generate keyword ideas?		Enter one keyword or phrase per line:
⦿	Descriptive words or phrases (e.g. green tea)		wind energy
○	Website content (e.g. www.example.com/product?id=74893)		☑ Use synonyms ▸ Filter my results Get keyword ideas

Calculate estimates using a different maximum CPC bid:
US Dollars (USD $) [   ] Recalculate ⓘ

Choose columns to display: ⓘ
Show/hide columns

Keywords	Estimated Ad Position ⓘ	Estimated Avg. CPC ⓘ	Advertiser Competition ⓘ	Local Search Volume: May ⓘ	Global Monthly Search Volume ⓘ	Search Volume Trends (Jun 2008 - May 2009) ⓘ	Highest Volume Occurred In	Match Type: ⓘ Exact
Keywords related to term(s) entered - sorted by relevance ⓘ								
[wind energy]	1 - 3	$1.34	▭	110,000	135,000	▁▁▃▅▆▇▇	Apr	Add Exact ⌄
[wind energy technology]	1 - 3	$1.27	▭	720	880	▃▁▁▂▃▆▇	Mar	Add Exact ⌄
[wind energy information]	1 - 3	$1.43	▭	Not enough data	1,000	No data	No data	Add Exact ⌄
[wind energy systems]	1 - 3	$0.73	▭	1,000	1,000	▁▁▂▅▆▆▇	Mar	Add Exact ⌄
[wind energy association]	1 - 3	$1.93	▭	880	1,300	▁▁▁▁▂▄▆	Apr	Add Exact ⌄
[wind energy cost]	1 - 3	$1.26	▭	Not enough data	880	No data	No data	Add Exact ⌄
[wind power energy]	1 - 3	$0.99	▭	4,400	3,600	▁▁▂▄▅▆▇	Mar	Add Exact ⌄
[home wind energy]	1 - 3	$1.32	▭	2,900	1,900	▁▁▂▃▄▅▆	May	Add Exact ⌄
[wind energy jobs]	1 - 3	$0.93	▭	8,100	9,900	▁▁▂▃▅▆▇	Mar	Add Exact ⌄
[wind energy company]	1 - 3	$0.90	▭	1,300	1,000	▁▂▂▃▄▅▆	May	Add Exact ⌄
[residential wind energy]	1 - 3	$1.46	▭	880	880	▁▂▃▃▄▅▆	Mar	Add Exact ⌄
[wind energy project]	1 - 3	$0.74	▭	390	390	▁▁▂▃▄▅▆	Mar	Add Exact ⌄

Project Phase 1

- Look out for group information this week (announcement)
- Introduction/method
- Any number of pages (in phase 1, consider the point below)
- 1500 - 1700 words (in the final report that is due on 05/06)
- 30 extra credit points if you do a project for any company (you will need my approval if you do this)

Acknowledgements/References

- *Kaushik, A. (2009). Web analytics 2.0: The art of online accountability and science of customer centricity. John Wiley & Sons.*

Thank you

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JSOM 4.414