

As mentioned in the README file, each section corresponds to a set of concepts and analysis applied to understanding the development of the Maven Fuzzy Factory over time. Therefore, the queries will be restricted by dates in order to simulate real time analysis in a growing business. In each section, find SQL scripts summarizing the concepts and code covered.

Analyzing Traffic Sources

Traffic source analysis is the tracking and measuring of data from different acquisition sources like Google, social media, or referral links. The three main traffic sources are direct, referral, and search. Their sources are gsearch and bsearch. Each traffic source can be analyzed to provide more granular information about the web traffic. Below are the top traffic sources for MavenFuzzyFactory.

1. Finding Top Traffic Sources

-- Where are all the bulk of traffic is coming from?

```
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SELECT
    utm_source,
    utm_campaign,
    http_referer,
    COUNT(DISTINCT website_session_id) AS sessions
FROM website_sessions
WHERE created_at <= '2012-04-12'
GROUP BY 1, 2, 3
ORDER BY 4 DESC;
```

Listing 1 Finding Top Traffic Sources

utm_source	utm_campaign	http_referer	sessions
gsearch	nonbrand	https://www.gsearch.com	3611
NULL	NULL	NULL	28
NULL	NULL	https://www.gsearch.com	27
gsearch	brand	https://www.gsearch.com	26
NULL	NULL	https://www.bsearch.com	7
bsearch	brand	https://www.bsearch.com	7

The bulk of users go through gsearch nonbrand. Gsearch nonbrand has 3611 sessions therefore, campaign ads have the most success attracting customers. Let's dive into gsearch nonbrand more.

2. Conversion Rate for Gsearch Nonbrand

	sessions	orders	conv_rate
►	3891	112	2.8784

Listing 2 conversion rate from session to order for gsearch nonbrand.

Gsearch nonbrand conversion rate is only a little under 3% which is not good. The business should spend more time bidding on other channels and bid down for gsearch nonbrand.

3. Gsearch Nonbrand weekly sessions

week_start	sessions
2012-03-19	893
2012-03-25	957
2012-04-01	1147
2012-04-08	988
2012-04-15	622
2012-04-22	592
2012-04-29	681
2012-05-06	401

Listing 3 gsearch nonbrand trended volume by week start

Since the we recommended bidding down gsearch nonbrand, at the week of 04/15/2012, there was a big decline in sessions for that campaign. We want to maximize the volume without spending more than we need to. Furthermore, the focus will be on finding ways to make the campaigns more efficient and increasing the conversion rate.