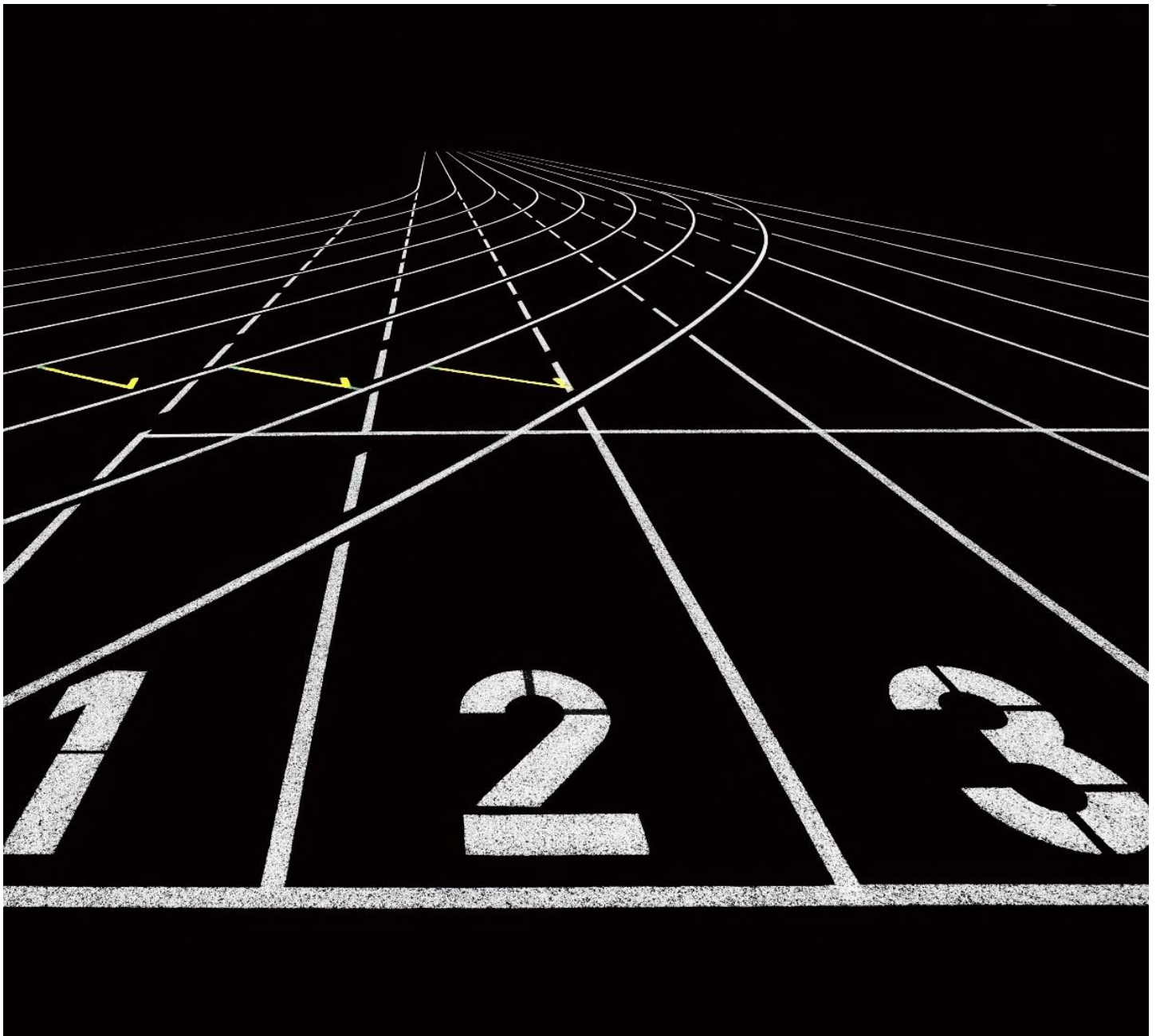


MAVEN FUZZY FACTORY

BUSINESS REPORT



BUSINESS PROBLEM

Maven Fuzzy Factory is an online retailer company which has been live for `8 months. We have prepared relevant metrics to show company's growth over the months. This report is focused on the trends to view the performance and quantify the revenue impact.

TRAFFIC SOURCE

TOP TRAFFIC SOURCE

Based on the Analysis of website_sessions datasource captured, we understood that there are multiple utm-source (gsearch, bsearch, Null) and utm-campaigns (brand, nonbrand, Null) which are driving the website traffic. Among all the utm-source & utm-campaigns, the '**gsearch nonbrand**' is the **Top traffic source** which is driving more than 75% of the website-traffic (given in Table 1). Hence '**gsearch**' seems to be the biggest driver of the business. Multiple optimizing methods were applied to increase the traffic source to impact the sales.

<i>utm_source</i>	<i>utm_campaign</i>	<i>http_referer</i>	<i>sessions</i>
<i>gsearch</i>	nonbrand	https://www.gsearch.com	38358
<i>bsearch</i>	nonbrand	https://www.bsearch.com	6451
<i>NULL</i>	NULL	NULL	2048
<i>NULL</i>	NULL	https://www.gsearch.com	1764
<i>gsearch</i>	brand	https://www.gsearch.com	1666
<i>NULL</i>	NULL	https://www.bsearch.com	429
<i>bsearch</i>	brand	https://www.bsearch.com	421

Table 1

Since there were multiple optimizing methods which were applied to improve the session and the conversion ratio. Let's now check how the trend over the last 8 months of the Traffic.

TREND OF SESSION_TO_ORDER

Sessions and orders are growing pretty substantially. The initial months had very few orders but it had grown over months to 4 times. The Conversion-rate also seemed to be at positive trend over the months.

<i>Yr.</i>	<i>Months</i>	<i>sessions</i>	<i>orders</i>	<i>conv_rate</i>
2012	3	1860	60	0.0323
2012	4	3574	92	0.0257
2012	5	3410	97	0.0284
2012	6	3578	121	0.0338
2012	7	3811	145	0.038
2012	8	4877	184	0.0377
2012	9	4491	188	0.0419
2012	10	5534	234	0.0423
2012	11	8889	373	0.042

MARKETING CAMPAIGNS

In order to steer the traffic to the right track we need to understand about the performance of the paid marketing campaigns. This not only helps to improve the sessions & CVR (conversion rate) but also helps the marketing manager to invest in the right track and optimize the bid of the paid traffic to quantify the impact of the campaigns. Hence, it's very important to understand the performance of the marketing campaigns separately. The below pivot table shows the performance of the 'gsearch' with the **campaigns** separately

<i>Yr.</i>	<i>Months</i>	<i>nonbrand sessions</i>	<i>nonbrand orders</i>	<i>brand sessions</i>	<i>brand orders</i>
2012	3	1852	60	8	0
2012	4	3509	86	65	6
2012	5	3295	91	115	6
2012	6	3439	114	139	7
2012	7	3660	136	151	9
2012	8	4673	174	204	10
2012	9	4227	172	264	16
2012	10	5197	219	337	15
2012	11	8506	356	383	17

NON-BRAND vs BRAND CAMPAIGNS

Although both the nonbrand and brand campaigns has grown over time. We are particularly interested in looking into brand campaigns. Brand campaigns represent someone is going into search engines and explicitly looking for your business.

This report shows that that both Non-Brand & Brand campaign has a good track record of performance over few months. The sessions and orders have increased dramatically. The sessions for Brand campaigns has increased over 6 times when compared to initial 3 months of the company's performance and same as the orders. They have grown over 4 times. Hence the brand campaigns are in rights track after optimizing in between and driving toward increased revenue generation. Non-Brand campaign is driving the majority of the website traffic. But we need to understand about the device impact on the Traffic.

IMPACT OF DEVICE TYPE

The NON-BRAND sessions and orders are almost more than 10 times when compared to BRAND sessions & orders. Hence Non-Brand Gsearch is driving the website traffic. But the **device type** also influences the traffic. Hence if dive deep to understand the trending pattern of **Gsearch Nonbrand** campaign by Device type it will give a lot more ideas to implement optimizing methods to improve the performance of the marketing campaigns & impact the conversion rate to increase the Revenue.

Monthly Sessions & Orders of Gsearch Non-Brand campaign by Device Type

<i>Yr.</i>	<i>Months</i>	<i>desktop_sessions</i>	<i>desktop_orders</i>	<i>mobile_sessions</i>	<i>mobile_orders</i>
2012	3	1128	50	724	10
2012	4	2139	75	1370	11
2012	5	2276	83	1019	8
2012	6	2673	106	766	8
2012	7	2774	122	886	14
2012	8	3515	165	1158	9
2012	9	3171	155	1056	17
2012	10	3934	201	1263	18
2012	11	6457	323	2049	33

The Desktop sessions are dominating when compared to mobile sessions. At the beginning there was only 2:1 ratio of desktop – mobile sessions but at the end of the time period there was more than 3: 1 ratio for the desktop vs mobile sessions. The orders have changed drastically when compared. It has changed from 5:1 ratio of desktop_mobile to more than 10:1 ratio over the time period.



Hence the **desktop sessions** of **gsearch nonbrand campaigns** are the best performer.

TRAFFIC FROM ALL SOURCES

Pessimistic board members may be concerned about large % of traffic from Gsearch, but there are other channel sources which contribute to the Traffic of the website. Hence, we need to understand about all other traffic source in order to take optimizing measures.

MONTHLY TREND OF ALL TRAFFIC SOURCES

Let's get into a brief idea about the traffic sources which are driving the website.

<i>utm_source</i>	<i>utm_campaign</i>	<i>http_referer</i>	
<i>gsearch</i>	<i>nonbrand</i>	<i>https://www.gsearch.com</i>	 Direct Type-in Traffic
<i>NULL</i>	<i>NULL</i>	<i>NULL</i>	
<i>gsearch</i>	<i>brand</i>	<i>https://www.gsearch.com</i>	 Organic Traffic
<i>NULL</i>	<i>NULL</i>	<i>https://www.gsearch.com</i>	
<i>bsearch</i>	<i>brand</i>	<i>https://www.bsearch.com</i>	
<i>NULL</i>	<i>NULL</i>	<i>https://www.bsearch.com</i>	
<i>bsearch</i>	<i>nonbrand</i>	<i>https://www.bsearch.com</i>	

The above table shows about the different source and campaigns including both paid and non-paid traffic. When the *utm_source* is *NULL*, *utm_campaign* is *NULL* and the *http_referer* is also *NULL* then there's no referring domain and then we know that it's direct type in traffic. When paid parameters are *NULL* i.e *utm_source* & *utm_campaign* but there is search engine then it's an organic search traffic. There are 4 types of Traffic i.e Gsearch, Bsearch, Organic, Direct. We have to check the monthly trend of all the channels.

<i>Yr.</i>	<i>Months</i>	<i>gsearch_sessions</i>	<i>bsearch_sessions</i>	<i>direct_sessions</i>	<i>organic_sessions</i>
2012	3	1860	2	9	8
2012	4	3574	11	71	78
2012	5	3410	25	151	150
2012	6	3578	25	170	190
2012	7	3811	44	187	207
2012	8	4877	705	250	265
2012	9	4491	1439	285	331
2012	10	5534	1781	440	428
2012	11	8889	2840	485	536

Gsearch is growing as we have seen earlier. Bsearch is also increase at same pace with gsearch. The interesting thing is that *direct_sessions* & *organic session* are also on the same track, without spending for the traffic. This also tells us that there is a lot of customer acquisition without spending any variable cost for traffic or marketing.

REVENUE BY GSEARCH LANDER

Initially we had only 'Home Page' as our landing page. So, after going through an understanding of the conversion rate we have introduced another landing page 'Lander-1' with an intention to improve the first impression of the customer and impact the conversion rate. For this we have used the data less than '2012-07-28' Since there was introduction of another landing page henceforth.

To create this report, we will start our query by fetching the report from the table `website_pageviews` by filtering results of `website_sessions` table.

Filters: `created_at < '2012-07-28'` (until here two landing pages were introduced)
`website_pageview_id >= 23504` (below this limit there was no lander-1 page)
`utm_source & utm_campaign = 'gsearch' & 'nonbrand'`

Next, we have linked the `landing_page` url with the respective minimum `pageview_id` and then link with the `order_id` to generate the output with orders

Finally, we can create the output results by counting the unique sessions and orders

CONVERSION RATE BY LANDING PAGE

<i>landing_page</i>	<i>count_of_sessions</i>	<i>count_of_orders</i>	<i>cvr</i>
/home	2261	72	0.0318
/lander-1	2316	94	0.0406

The '**Lander-1**' have slightly more no of counts in session as well as the orders. Hence the conversion rate for the landing page '**lander-1**' have little better performance when compared to the landing page 'home page'. It has 0.0088 additional orders per sessions.

This is the report which was created till July. Now if we find out the sessions routed to 'lander-1' and multiply by the incremental conversion rate per order then we can get the total increase in order.

There were 22972 sessions which were routed to 'lander-1'. Hence $22972 \times 0.0088 = 202$ orders increased till November

$$\text{Increase in no. of orders per month from (Jul - Nov)} = \frac{202}{4} = 50.5$$

So nearly 50 orders per month is increased after the test which says the performance has improved with the new landing page. This also means that the new landing page 'lander-1' is generating extra revenue of 50orders per month when compared to the earlier home page.

CONVERSION FUNNEL ANALYSIS

Conversion funnel analysis is understanding & optimizing the journey of a customer on each step towards purchasing the products. Identifying the percentage of the customers which are abandoning at each step and optimizing the critical pain point to reduce the abandoned percentage.

<i>segment</i>	<i>lander_click rate</i>	<i>product_click rate</i>	<i>fuzzy_click rate</i>	<i>cart_click rate</i>	<i>shipping_click rate</i>	<i>billing_clickrate</i>
<i>saw_homepage</i>	0.4166	0.7261	0.4327	0.6757	0.84	0.4286
<i>saw_landerpage</i>	0.4676	0.7128	0.4508	0.6638	0.8528	0.4772

INFERENCE

The conversion funnel shows us that:

1. **Lander click rate** for 'Lander-1' page is greater than 'Home' Page. This means introduction of new landing page has increased the traffic to the website. This is the 1st positive step toward growth.
2. **Product click rate** is almost same for both the landing page. This means the customers who are visiting the landing page are click on the products listed at same pace.
3. **Fuzzy click rate** tells about the story of mr_fuzzy product which is an example of product listed. Customers checking the products page of fuzzy has also increased by almost 2%
4. **Shipping click rate** also tells us that the decision of buying or not buying for a customer has also increased slightly by 1.28% which is another positive note toward impacting the revenue generation
5. **Billing click rate** has increased by almost 5% which tells that 'lander-1' page has successfully able to impact the revenue & customer acquisition.

IMPACT OF BILLING TEST

There is also another introduction of billing page - '**Billing-2**'. We have to check the impact of revenue per the billing sessions. This will summarize the performance of new Billing page.

<i>billing_version</i>	<i>sessions</i>	<i>revenue_per_billing_seen</i>
/billing	657	22.826484
/billing-2	654	31.339297

INFERENCE

The new billing page '**Billing-2**' shows that there is significant growth in revenue per billing session. Hence the introduction of new billing_page has a significant impact.

