

# Sales Performance & Web traffic analysis using SQL

Responses & recommendations from the sales and web traffic analysis

## Sales analysis

1. What are the gross annual and monthly sales and the absolute margin?

#Gross profit

	anyo	mes ^	ventas	
►	2013	1	19966,10	
	2013	2	3869,25	
	2012	3	2999,40	
	2012	4	4949,01	
	2012	5	5398,92	
	2012	6	6998,60	
	2012	7	8448,31	
	2012	8	11397,72	
	2012	9	14347,13	
	2012	10	18546,29	
	2012	11	30893,82	
	2012	12	25294,94	

#Absolute margin

	anyo	mes ^	ventas	costo	margen	
►	2013	1	19966	7742	12224	
	2013	2	3869	1498	2372	
	2012	3	2999	1169	1830	
	2012	4	4949	1930	3020	
	2012	5	5399	2105	3294	
	2012	6	6999	2729	4270	
	2012	7	8448	3294	5155	
	2012	8	11398	4444	6954	
	2012	9	14347	5594	8754	
	2012	10	18546	7231	11316	
	2012	11	30894	12045	18849	
	2012	12	25295	9862	15433	

2. What are the average gross sales of each month and year, returns the TOP 10?

	anyo	mes ^	ventas_brutas	
►	2013	1	51,2	
	2013	2	51,6	
	2012	3	50,0	
	2012	4	50,0	
	2012	5	50,0	
	2012	6	50,0	
	2012	7	50,0	
	2012	8	50,0	
	2012	9	50,0	
	2012	10	50,0	

3. What is the average monthly sales per month?

	anyo	mes	promedio_mensual	
►	2013	1	644,07	
	2013	2	552,75	
	2012	3	230,72	
	2012	4	170,66	
	2012	5	192,82	
	2012	6	233,29	
	2012	7	272,53	
	2012	8	367,67	
	2012	9	478,24	
	2012	10	598,27	
	2012	11	1029,79	
	2012	12	815,97	

4. What is the best-selling product in monetary terms (gross sales)?

	product_name	ventas	
►	Osito Cariñoso	149570,08	

## 5. What is the product with the greatest margin?

	product_name	margen_absoluto	
►	Osito Cariñoso	91256,00	
	Osito Amor Por Siempre	2212,50	

## 6. Can we know what the release date of each product is?

Considering that we are analysing the data of an e-commerce we can "interpret" that the question refers to:

- A. Date on which the product was registered in the system.
- B. Date on which the first marketing year is created and from which the first sale comes.

We will analyse both approaches.

### A. Date on which the product was registered in the system

	product_name	minima_fecha_creacion	
►	Osito Cariñoso	2012-03-19 10:42:46	
	Osito Amor Por Siempre	2013-01-07 11:40:06	

### B. Date on which the first marketing year is created and from which the first sale comes.

	user_id	utm_campaign	product_name	created_at	minima_fecha_creacion	
►	20	brand awareness	Osito Cariñoso	2012-03-19 10:22:58	2012-03-19 10:22:58	

7. Calculates gross sales per year as well as the numerical and percentage margin of each product and order it by product.

	product_name	anyo	ventas_brutas	margen_absoluto	margen_porcentual
►	Osito Cariñoso	2012	129274.14	78873.00	61.00%
	Osito Cariñoso	2013	20295.94	12383.00	61.00%
	Osito Amor Por Siempre	2013	3539.41	2212.50	63.00%

8. Which are the months with the highest gross sales, returns the TOP 3?

	mes	anyo	ventas_brutas
►	11	2012	30,893.82
	12	2012	25,294.94
	1	2013	19,966.10

## Web traffic analysis

1. Which ads (ads) or content have attracted more sessions?

	utm_content	utm_campaign	cantidad_sesiones
►	g_ad_1	brand awareness	49,978
			7,248
	g_ad_2	influencer	2,876
	b_ad_2	influencer	690
	b_ad_1	brand awareness	9,208

## 2. How many logins and sales has each ad generated per year?

anyo	utm_content	utm_campaign	ventas	cantidad_sesiones
▶ 2012	g_ad_1	brand awareness	87282,54	1746
2012	g_ad_2	influencer	6248,75	125
2012			14547,09	291
2012	b_ad_2	influencer	1549,69	31
2012	b_ad_1	brand awareness	19646,07	393
2013	g_ad_1	brand awareness	13017,46	254
2013	g_ad_2	influencer	2029,61	39
2013			5138,99	101
2013	b_ad_1	brand awareness	3089,40	60
2013	b_ad_2	influencer	559,89	11

## 3. Is it the same sessions as users? How many individual users do we have?

cantidad_usuarios_unicos
▶ 62,224

## 4. Continuing with previous question, And by source? Number of users and sessions?

utm_source	cantidad_usuarios_unicos	cantidad_sesiones
▶	5,899	7,248
bsearch	9,808	9,898
gsearch	51,118	52,854

## 5. What are the sources that have given more sales?

utm_source	cantidad_usuarios_unicos	cantidad_sesiones
▶	5,899	7,248
bsearch	9,808	9,898
gsearch	51,118	52,854

6. What are the months that have attracted more traffic?

mes_sesion	cantidad_sesiones
11	14011
12	10072
10	8183
9	6546
1	6401
8	6097
7	4249
6	3963
5	3736
4	3734
3	1879
2	1129

7. Since we saw the month that has had more traffic. Could you see from that month the number of sessions that came by mobile, and, how many came by computer?

mes_sesion	cantidad_sesiones
11	14011
12	10072
10	8183
9	6546
1	6401
8	6097
7	4249
6	3963
5	3736
4	3734
3	1879
2	1129

8. Which campaigns have given more margin for products?

product_name	utm_campaign	margen_absoluto
Osito Cariñoso	brand awareness	73566,0
Osito Cariñoso	influencer	6008,5
Osito Cariñoso		11681,5
Osito Amor Por Siempre		337,5
Osito Amor Por Siempre	brand awareness	1537,5
Osito Amor Por Siempre	influencer	337,5

## Conclusions

The most relevant results from the analysis are as follows:

1. Total sales amount to €153,109.49. The product with the highest sales is the 'Osito Cariñoso' with gross sales of €149,570.08 during the 11 months of the company. However, it is not the product that represents the highest margin per unit. The product with the highest absolute margin is the 'Osito Amor Por Siempre' with a margin of €37.50, compared to 'Osito Cariñoso' with a margin of €30.50.
2. The average monthly sales are €465.57. Additionally, the average purchase ticket per customer is €51.60. This is due to the limited variation in the selling price of the products.
3. The months with the highest sales are November and December 2012, and January 2013. We can deduce that this increase in sales may be due to an advertising campaign during the Black Friday and Christmas months.
4. The 'brand awareness' and 'influencer' advertising campaigns through Google generated the most sessions or traffic to the website, with 49,978 and 2,876 respectively. We have 7,248 sessions with an unknown origin. In the same vein, the 'brand awareness' campaign has total sales of €123,035.47 and a total of 2,453 sessions that resulted in a sale. Likewise, the influencer campaign produced total sales of €10,387.94 and a total of 206 sessions that converted into a sale.
5. Regarding the absolute margin, the 'brand awareness' campaign is the most profitable for the company, reporting a gross margin per unit of €75,103.50. Also, the 'influencer' campaign reported a gross margin per unit of €6,346.00. We have profits of €12,019.00 that do not come from an advertising campaign, with an unknown origin.

6. The sources or search engines include Google, alternative search engines, and unknown. The Google search engine generated a total of €108,578.36 compared to the alternative search engine with sales of €24,845.05. A total of €19,686.08 in gross sales is attributed to unknown search engines.

## Recommendations

1. The product “Osito Amor Por Siempre” represents only 2% of total sales. It is advisable to consider the following questions:
  - A. Does this product result in surplus stock?
  - B. How much does it cost the company to keep this product in stock?
  - C. Is it possible to offer a discount without causing a loss to the company?

It is necessary to evaluate whether it is worthwhile to continue investing in advertising campaigns through an alternative search engine, as the web traffic it has generated is only 9,898.

How much does the influencer campaign cost us? What is the ROI and ROA? Is it profitable to continue investing in this campaign?

We have observed that the advertising campaign through the Google search engine generates more traffic. It would be an option to invest the budget allocated to the 'influencer' campaign in Google, as it would result in a higher number of sales.