



# DIGITAL MARKETING ANALYTICS AND STRATEGY RECCOMENDATIONS FOR MAPFRE IN 2018

## ABSTRACT

*"Within marketing, we must understand what actions help us generate more business and move budget to those actions which are more profitable". – CMO of Mapfre.*

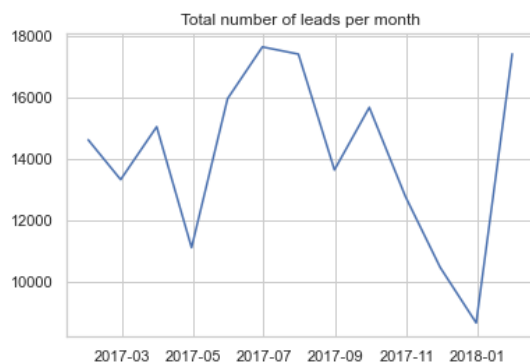
**Guillermo Hopkins**

BIG DATA & ARTIFICIAL INTELLIGENCE IN MARKETING

## Summary

Mapfre leads have not been increasing over time. The most important variables that influence the leads were analyzed and a Linear Regression model was applied to explain the relationship between them and offer clear guidelines to improve the results. It is expected that Mapfre can improve the leads focusing resources on paid advertising, users of 35-44 years old, female users and desktop connections. It is also recommended investigating the other non-conventional channels and evaluating the SEO strategy, especially regarding keyword performance.

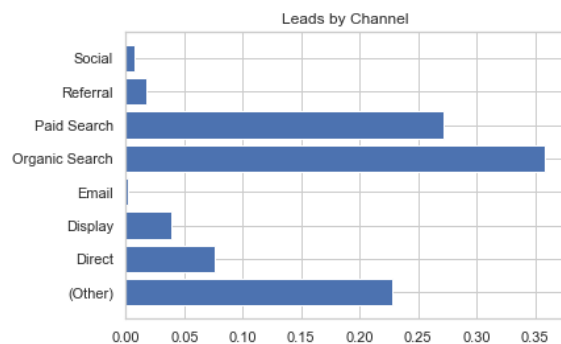
## Introduction



The total number of daily leads have not been increasing since 2017. It is noticeable that there is a spike at the beginning of 2018, but it only seems to be a seasonal behavior that has occurred in the past.

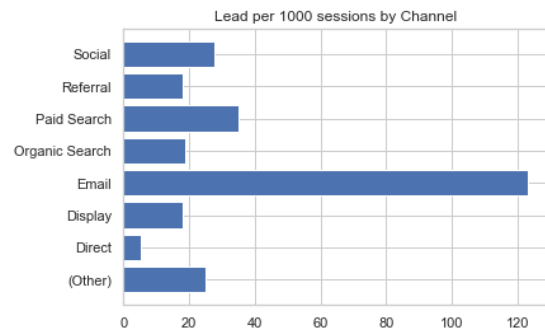
In the present document it is going to be presented an analysis of the most important marketing metrics to see where Mapfre can focus its attention to generate more leads in the future.

## Context

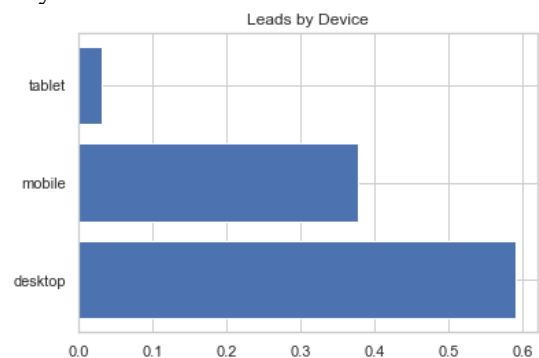


The channels that generate the greatest number of leads are Organic Search (36%), Paid Search (27%) and Other channels (22%), followed by

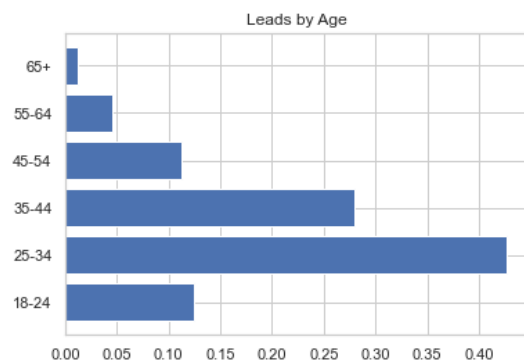
Direct (7%) and Display (3%). By the other hand, Email, Social and Referral (<5% together) do not generate many leads compared to the other mentioned.



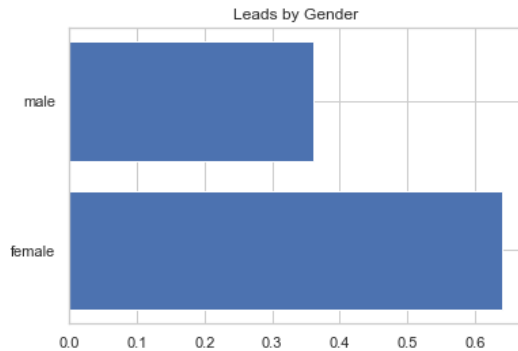
Organic Search seems to be the best channel to generate leads. Nonetheless, when comparing the leads per every 1000 sessions, we can see Organic Search has one of the worst ratios (<20 leads per 1000 sessions). This channel generates a larger number of sessions, but not many of the users are transformed into a lead. One of the possible explanations is that the SEO strategy is not focusing on the correct keywords. Email, for other side, has a better ratio, but fails to generate many leads.



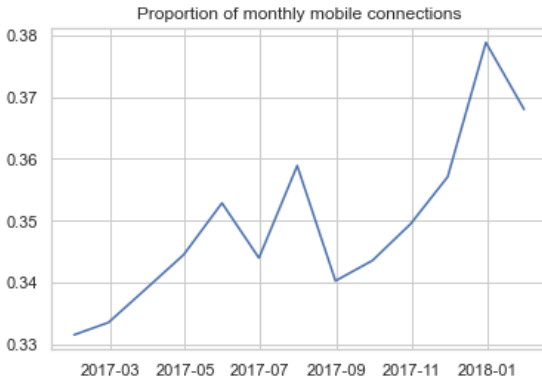
The device category that generates more leads is Desktop (59%), followed by Mobile (38%). In comparison, Tablet (3%) generates a small number.



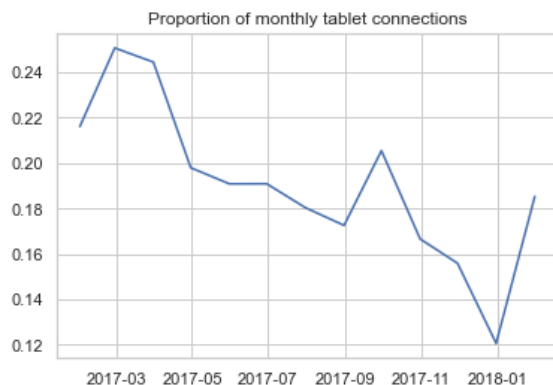
The age groups that generate more leads are 25-34 (43%) and 35-44 (28%), followed by 18-24 (12%) and 45-54 (11%). In comparison, 55-64 and +65 (6% together) generates a small number.



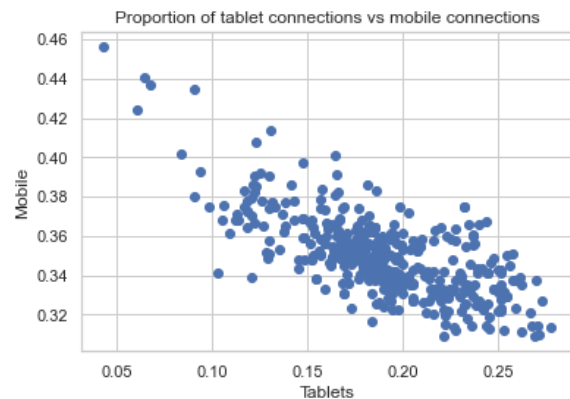
More than 60% of the leads are generated by female users.



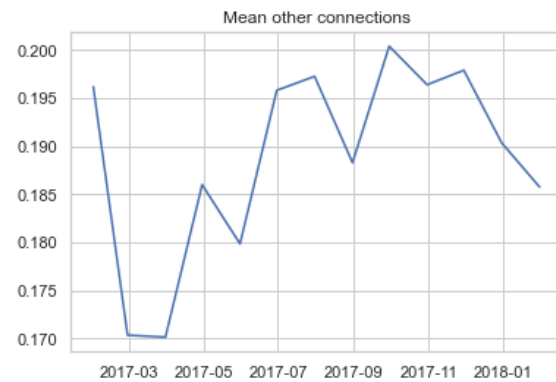
There has been an important increase in the proportion of monthly mobile connections since 2017, reaching a peak (close to 38%) in January of 2018.



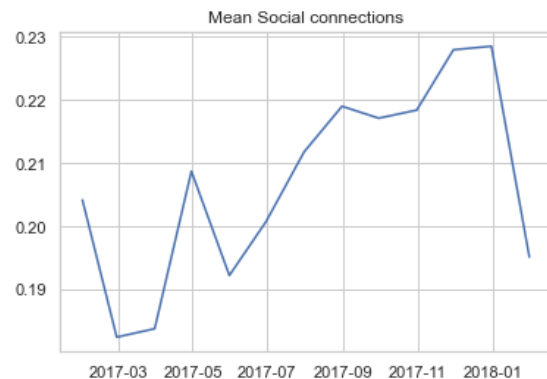
There has been an important decrease in the proportion of tablet connections since 2017, reaching its lowest point (12%) in January of 2018.



It is clear there is a negative relationship between the proportion of tablets connections and mobile connections.

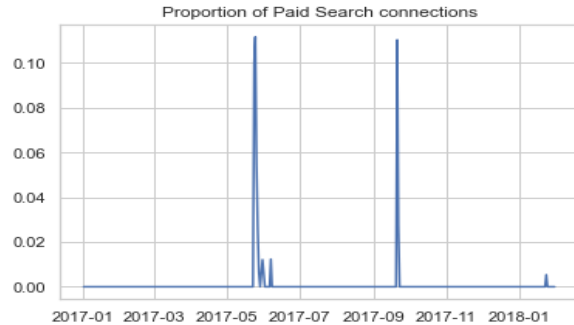


There has been an increase in the proportion of connections through the non-conventional channels since 2017, but there is a visible decrease in 2018.



There has been an increase in the proportion of connections through the non-conventional channels since 2017, but there is a visible decrease in 2018.

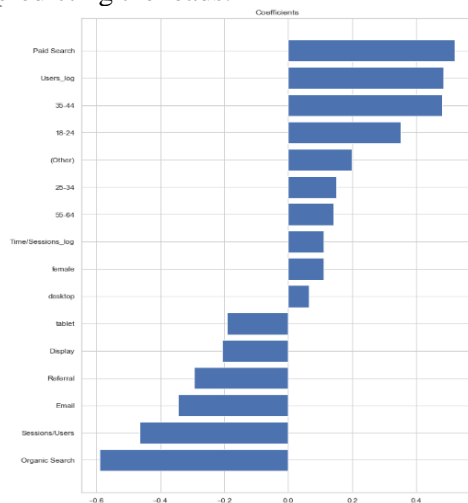
The other features do not show a clear trend in the last years.



Finally, it seems that Mapfre has had five paid campaigns since 2017. They seem to have had a very good result, because they generated more than 27% of the total number of leads since 2017, as it was shown previously. An astonishing performance.

### Linear Regression model

A Linear Regression was applied to have a better understanding of the relationship between the features and the leads. Only the most relevant variables were selected, with special care of removing as many collinearities as possible and having only those really significant for predicting the leads.



The model explains more than 67% of the behavior of the leads. And it was found that:

- When the channel is Paid Search, the leads increase in 52% on average.
- For every 1% increase in the users, the leads increased in 48% on average.
- When the users are in the range of 35-44 years, the leads increase in 48% on average.
- When the users are in the range of 18-24 years, the leads increase in 35% on average.

- When the channel is one of the non-conventional, the leads increase in 20% on average.
- When the users are in the range of 25-34 years, the leads increase in 15% on average.
- When the users are in the range of 55-64 years, the leads increase in 14% on average.
- For every 1% increase in the average time spend on page per session, the leads increased in 11% on average.
- When there are female users, the leads increase 11% on average.
- When the device is desktop, the leads increase 6% on average.
- When the device is tablet, the leads decreased 19% on average.
- When the channel is display, the leads decrease 20% on average.
- When the channel is referral, the leads decrease 29% on average.
- When the channel is email, the leads decrease 34% on average.
- For every 1% increase in the average sessions per user, the leads decrease 47% on average.
- When the channel is organic search, the leads decrease 59% on average.

### Recommendations

Given the information shown in the document, Mapfre could increase its leads following the next recommendations:

- Focus more resources on paid campaigns.
- Focus its resources especially on users between 35-44 years old.
- Investigate which are the other non-conventional channels that are generating leads.
- Focus more resources on female users.
- Focus more attention on users that navigates through desktop devices.
- Do not focus many resources on email campaigns if the ultimate goal of it is generating leads.
- Evaluate and improve the SEO strategy, especially regarding keyword performance.

## Annex

Dep. Variable:	Leads_log	R-squared:	0.678			
Model:	OLS	Adj. R-squared:	0.678			
Method:	Least Squares	F-statistic:	7666.			
Date:	Sun, 03 Apr 2022	Prob (F-statistic):	0.00			
Time:	14:31:52	Log-Likelihood:	-45268.			
No. Observations:	58295	AIC:	9.057e+04			
Df Residuals:	58278	BIC:	9.072e+04			
Df Model:	16					
Covariance Type:	nonrobust					
=====						
	coef	std err	t	P> t	[0.025	0.975]
const	-1.1576	0.016	-70.497	0.000	-1.190	-1.125
female	0.1109	0.005	24.421	0.000	0.102	0.120
25-34	0.1503	0.008	19.583	0.000	0.135	0.165
35-44	0.4811	0.008	56.873	0.000	0.464	0.498
18-24	0.3506	0.008	43.021	0.000	0.335	0.367
55-64	0.1423	0.007	19.300	0.000	0.128	0.157
desktop	0.0652	0.006	11.259	0.000	0.054	0.077
tablet	-0.1905	0.008	-24.126	0.000	-0.206	-0.175
Organic Search	-0.5908	0.007	-84.477	0.000	-0.604	-0.577
Display	-0.2060	0.009	-23.141	0.000	-0.223	-0.189
Paid Search	0.5195	0.058	8.883	0.000	0.405	0.634
(Other)	0.1984	0.006	30.904	0.000	0.186	0.211
Email	-0.3440	0.011	-30.327	0.000	-0.366	-0.322
Referral	-0.2954	0.015	-20.286	0.000	-0.324	-0.267
Sessions/Users	-0.4652	0.009	-49.895	0.000	-0.484	-0.447
Users_log	0.4857	0.003	152.174	0.000	0.479	0.492
Time/Sessions_log	0.1114	0.003	38.822	0.000	0.106	0.117
=====						
Omnibus:	665.516	Durbin-Watson:	1.847			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	690.009			
Skew:	-0.260	Prob(JB):	1.47e-150			
Kurtosis:	3.121	Cond. No.	186.			

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

## Sources

IE - Marketing Intelligence - Individual

Assignment Dataset.csv. Available on:

<https://drive.google.com/file/d/1yu4Q3Q68TsqrkM6DtZzIRyIsvkhloXPU/view>