

An Anlysis to Online Marketing KPI

Dataset

KPIs	Nov 20	Dec 20	Jan 21	Feb 21	Increment MoM		
					Dec	Jan	Feb
Marketing Inbound leads (#)	255	245	140	126	-10	-105	-14
Total leads in the pipeline (#)	1,400	841	202	662	-559	-639	460
Hot leads in the pipeline (#)	141	555	64	68	414	-491	4
Opportunities created (#)	88	122	99	123	34	-23	24
Closed/won opportunities (#)	67	78	72	88	11	-6	16
Portion of Hot leads in pipeline	10%	66%	32%	10%			
Rate : Hot leads turns into oppportunity	62%	22%	155%	181%			
Opportunities in pipeline (\$M)	\$2.3M	\$4.2M	\$2.5M	\$2.4M	-\$1.9M	\$1.7M	\$0.1M
Closed Won opportunities (\$M)	\$2.3M	\$3.8M	\$2.2M	\$1.5M	-\$1.5M	\$1.6M	\$0.7M
Win rate % (# closed over pipeline)	76%	64%	80%	62%	-12%	16%	-18%
Salesforce Usage Activities (calls, emails, meetings,...)	2,200	1,829	1,514	9,466	-371	-315	7,952
Numbers of days to convert leads (# days)	5 day	4.7 day	1 day	2 day	-0 day	-4 day	1day
Sales cycle: aver. Days to win Opp (# days)	14 days	12 days	10 days	10 days	-2 day	-2 day	0day
Duration from leads to close an Opp	19 days	17 days	11 days	12 days			
Cost Per Inbound (\$USD)	\$4	\$3	\$3	\$3	-1\$	0\$	0\$
Incremental Revenue Inbound (\$K)	\$93K	\$91K	\$261K	\$26K	-\$2K	\$170K	-\$235K
New business: % Revenue from brand-new opps	85%	24%	59%	40%	-61%	35%	-19%
Opportunities created Inside Sales (#)	10	7	18	7	-3	11	-11

The Insight from Analysis

Step0. Data Cleaning

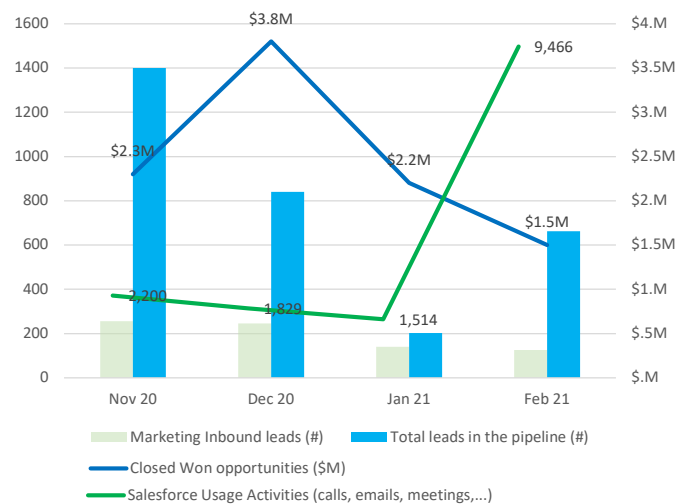
- Removing currency characters and set the type like "\$"##"M"
- Removing (days) characters and set the format, "days" using the function, "format cell"
- Removing the currency characters and set the type like "\$"##,##0,"K"

Step1. Setting the goal of this analysis

Question : The value of the column, "Closed Won Opportunities" is set to rise in March? To make it true, what activity should be followed?

Step2. EDA and Visualization : Understanding the relationship of variables by trying different diagrams

Diagram 1. Trend in the major steps of current business



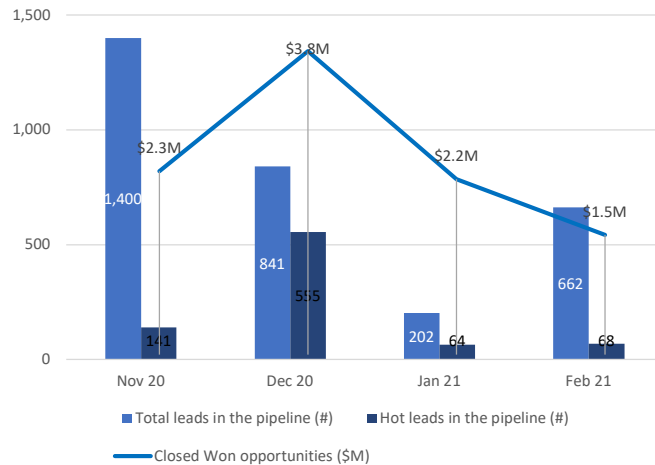
The Diagram 1 shows that Total Leads in the pipeline(#) and Closed Won Opp (\$M) are in positive correlation with a month term. For instance, dramatic drops in Total leads in pipeline on **December** has appeared as 42% drops in "Closed Won Opp (\$M) " on **January**.

Thus, **Total leads in the pipeline(#) is a main factor** for closing **won** opportunity. If so, which variable has a strong relation with the total leads in the pipeline?

The line in green (Salesforce Usage Activities) looks like having the similar trend with the bar in sky blue (Total leads in the pipeline) even if it doesn't follow its dramatic changes of Total leads in the pipeline (#). As the most of total leads in the pipeline has closed with the value of \$3.8M in december, the total leads in January looks quite low. However, by Salesforce's great activity with the value, 9,466 in Feb, pipeline has grown up in Feb. With high possibility, there will be **big growth in Closed Won Opportunity in March due to growing leads**.

In this moment, It is in need to look into the variable, 'Total leads in the pipeline (#)'

Diagram 2. Relation of two variables "Closed Won Opportunity" and "hot leads in pipeline"



From given data, we can find another variable, Hot leads in the pipeline (#), which is the part of total leads in the pipeline. Unlike Total leads in the pipeline, the trend of the hot leads looks linked with the variable, Closed Won opportunity(#). It means the more value of hot leads, the higher closed won opportunities.

Then, what factor would separate the "hot leads" and "non hot leads"?

On the given data, it is assumed that there are two major marketing activities like Salesforce Activities and Marketing Inbound. Salesforce activities helps to increase the number of total leads. However, Can Salesforce help to develop the leads into opportunity?

Diagram3. Marketing activities and Hot leads

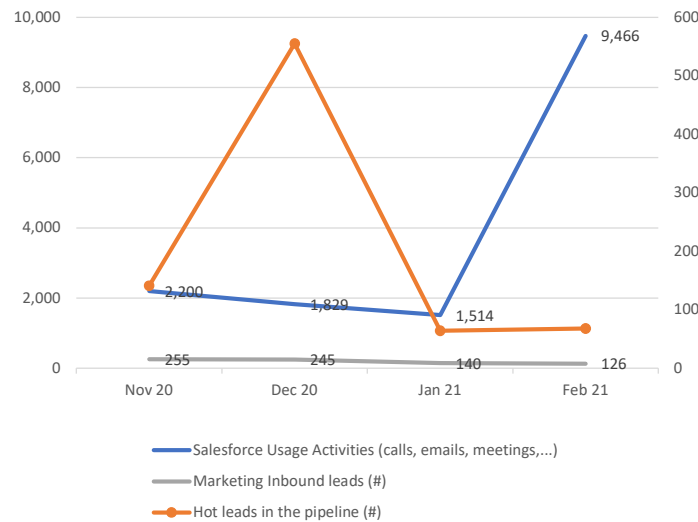
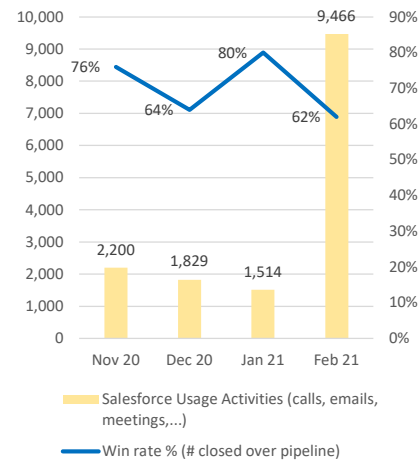


Diagram 4. Salesforce and win rate

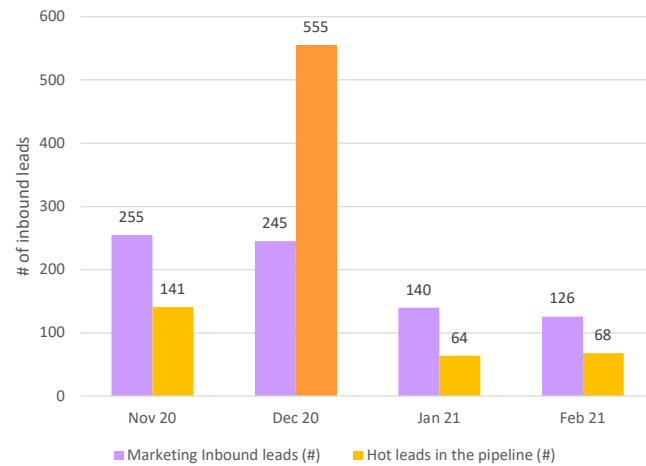


I can't find any significant relations between two marketing activities (Sales force and Inbound marketing) and Hot leads in the pipeline which seems to decide the closed won opportunities on Diagram3.

Even Diagram 4 seems like verifying that Salesforce isn't a powerful tool to raise the win rate.

I would assume that Salesforce or Marketing Inbound are not helpful to convert the lead into hot leads even if they can make a leads to raise the size of the number of leads. Maybe, additional promotion which fits to the season like christmas or new year might be required to yank customers' interest (Considering the average duration of closing opportunity, 15 days, any campaign

Diagram 5. # of Hot leads and # of MKT inbounds



Even though the revenue of Inbound marketing is very low compared with the amount of Closed opportunity in entire business, this activity should be kept in future. Except December, trend of # of Hot leads moves together with the # of Marketing Inbound. Also, Inbound marketing could deliver differentiated message to whom visits to company's Social Media ect.

Step3. Conclusion

As for the question given on beginning, we can say there will be a high increase in "Closed Won Opportunities" on March with a grown number of salesforce activities. To be sure about this hypothesis, we need to enhance the marketing inbound activity, delivering promotion or campaign.