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Auto/Mate®

Salesforce Data Analysis

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Agenda

- Project Description
- Data
- Models & Languages/Tools
- Business Insights & Findings
 - ◆ Time Series Analysis
 - ◆ Leads Source
 - ◆ Consultants
 - ◆ Employee Performance vs. Time
 - ◆ Lost Reason



Salesforce data analysis

We are working with the Salesforce data of Auto/mate, to uncover the behavioral patterns of the leads through the sales funnel. Our aim is to help our client make more sales.

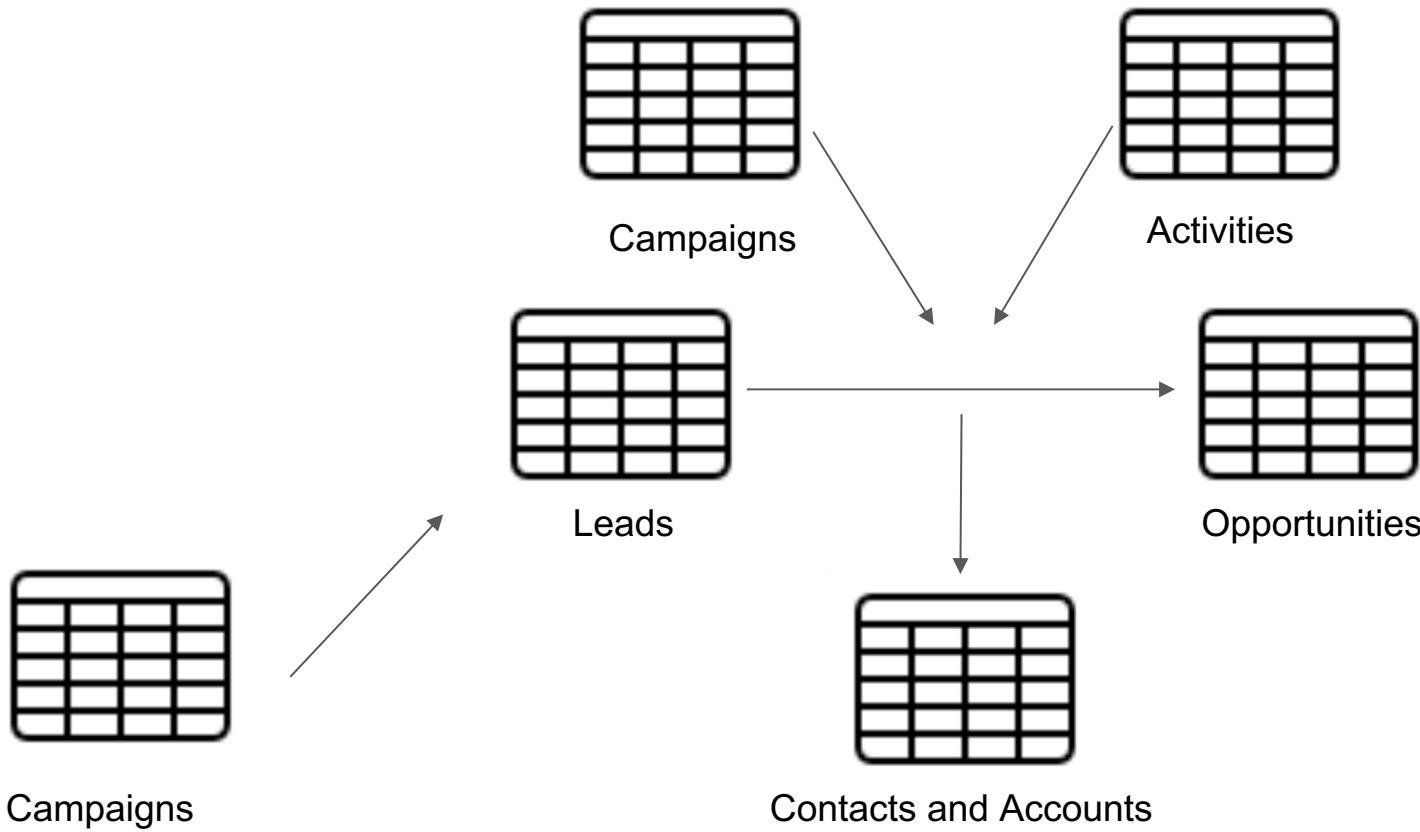
Image 1: Converting leads to accounts



Image 2: Qualifying leads



Salesforce datasets in csv format throughout the sales funnel was used

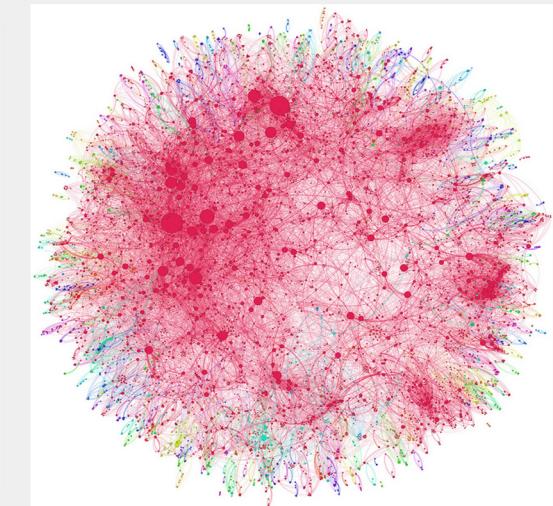


Multiple models and tools were used in different stages of the project



Models and techniques:

1. Time series analysis
2. Logistic regression
3. Decision trees
4. Random forest algorithm





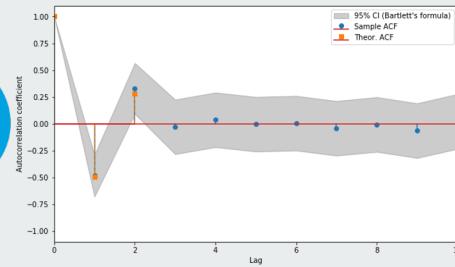
Time Series Analysis



Salesforce Data from January 2016 to December 2018 was used

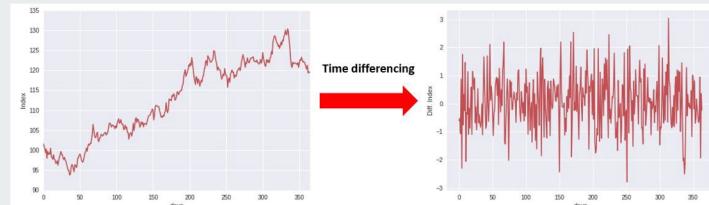
Data Collection

- Salesforce data across the sales funnel of Auto/Mate was collected
- This included various sales and marketing activities including timestamps for each activity



Data Transformation

- Time series specific Data cleaning techniques were used to remove outliers and impute missing data
- Raw data was transformed into time series level data to perform modelling



Additive Time Series Model

- Additive time series model was used because amplitude of seasonal effect in the data is same each year
- The time series data was decomposed into its components namely Trend, Seasonality and Noise in the data

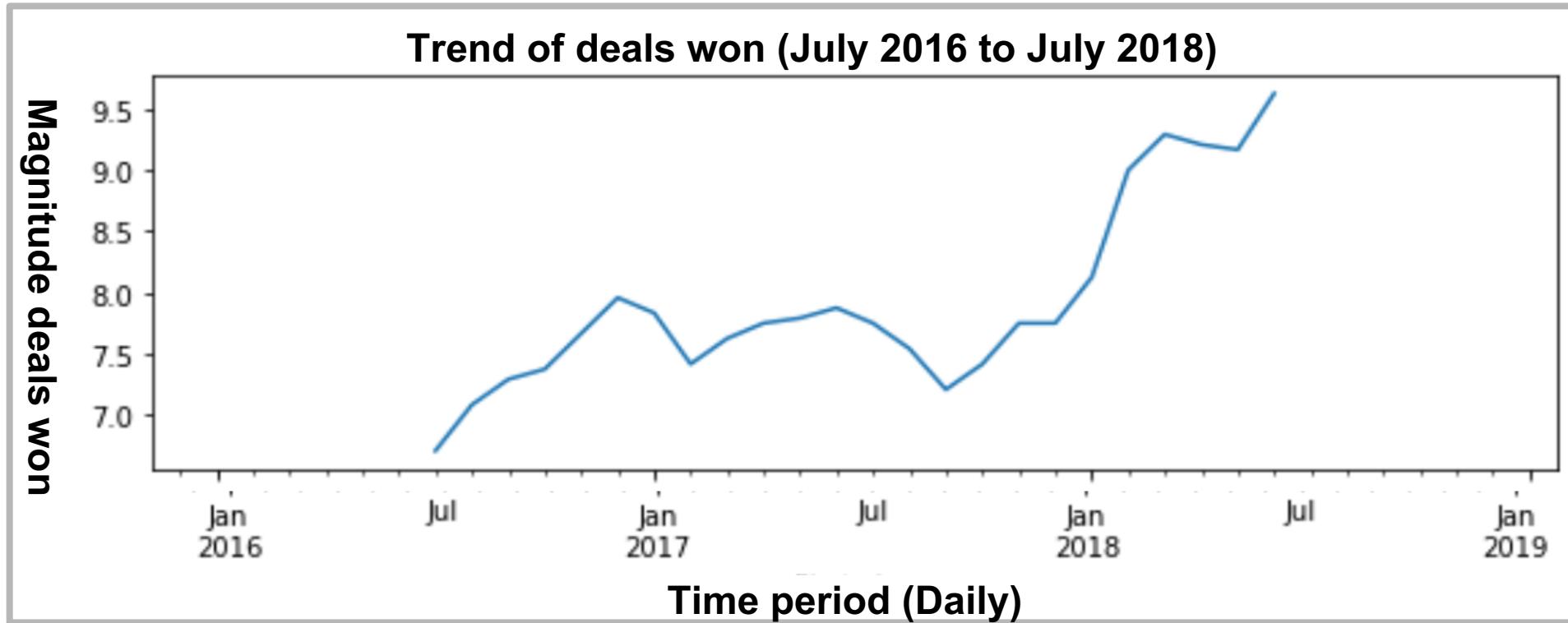




Deals Won - Trend



Trend Of Deals Won Has Been Increasing With Time



- The magnitude of deals won had been stagnant from January 2017 - December 2018. However, the rate of successful deals started increasing from the last quarter of 2017.

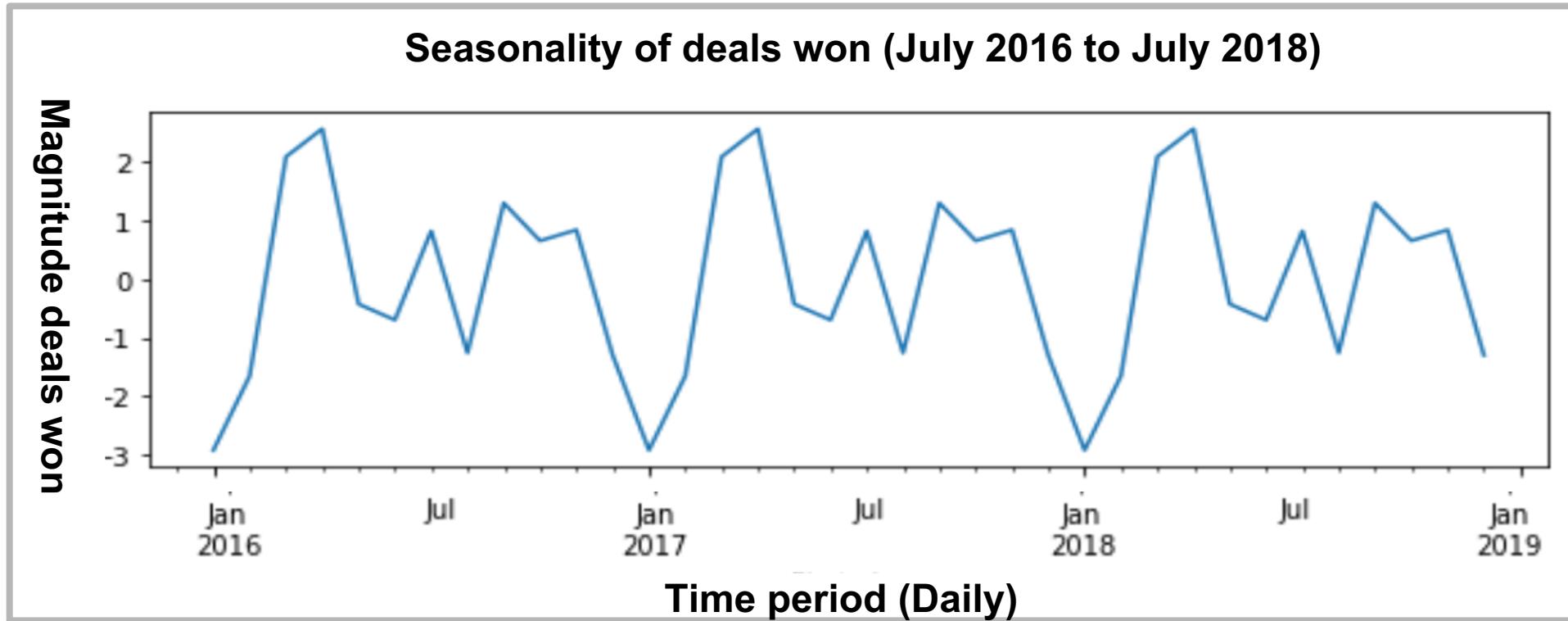




Deals Won - Seasonality



Yearly seasonality from January - January is observed in the data



- The amplitude of deals won has the same seasonal pattern in the past 3 years with high volume of sales in the first quarter of every year

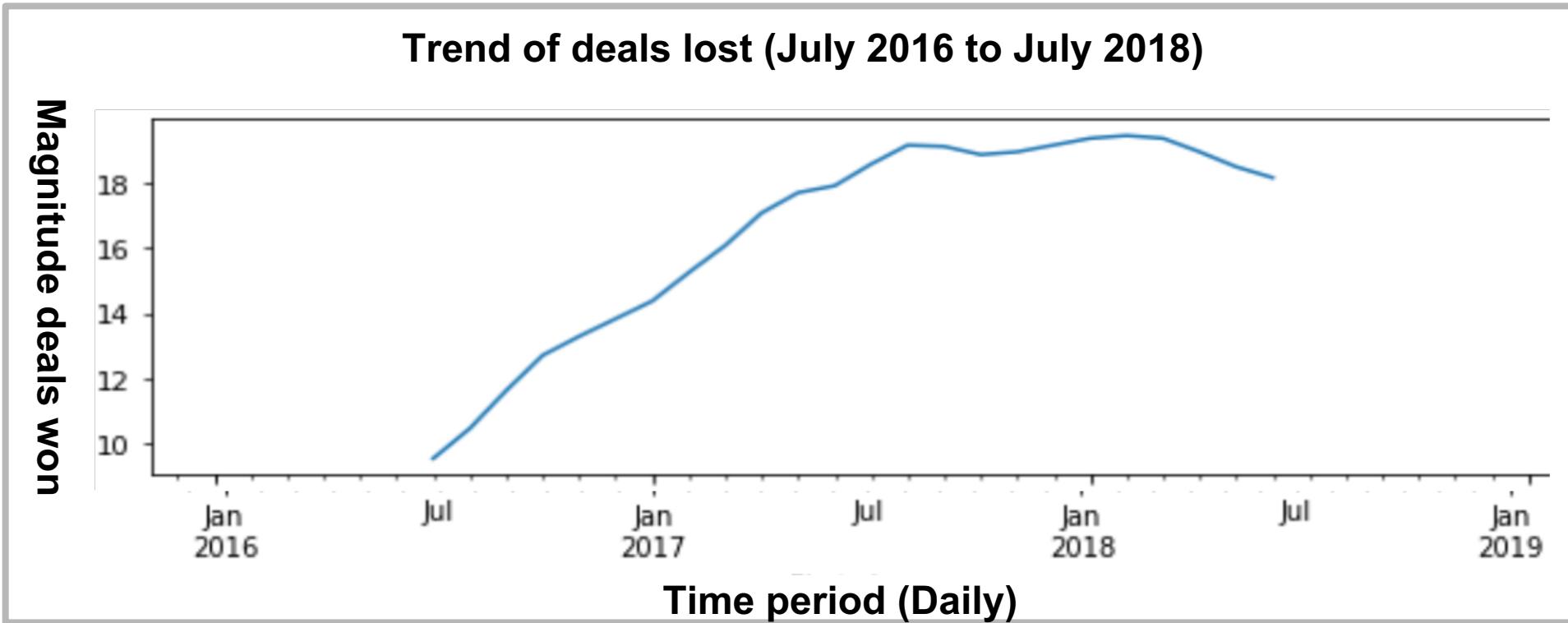




Deals Lost - Trend



Trend Of Deals Lost Started Decreasing After December 2017



- The magnitude of deals lost had been increasing from July 2017 - January 2018. However, rate of deals lost started decreasing from first quarter of 2018

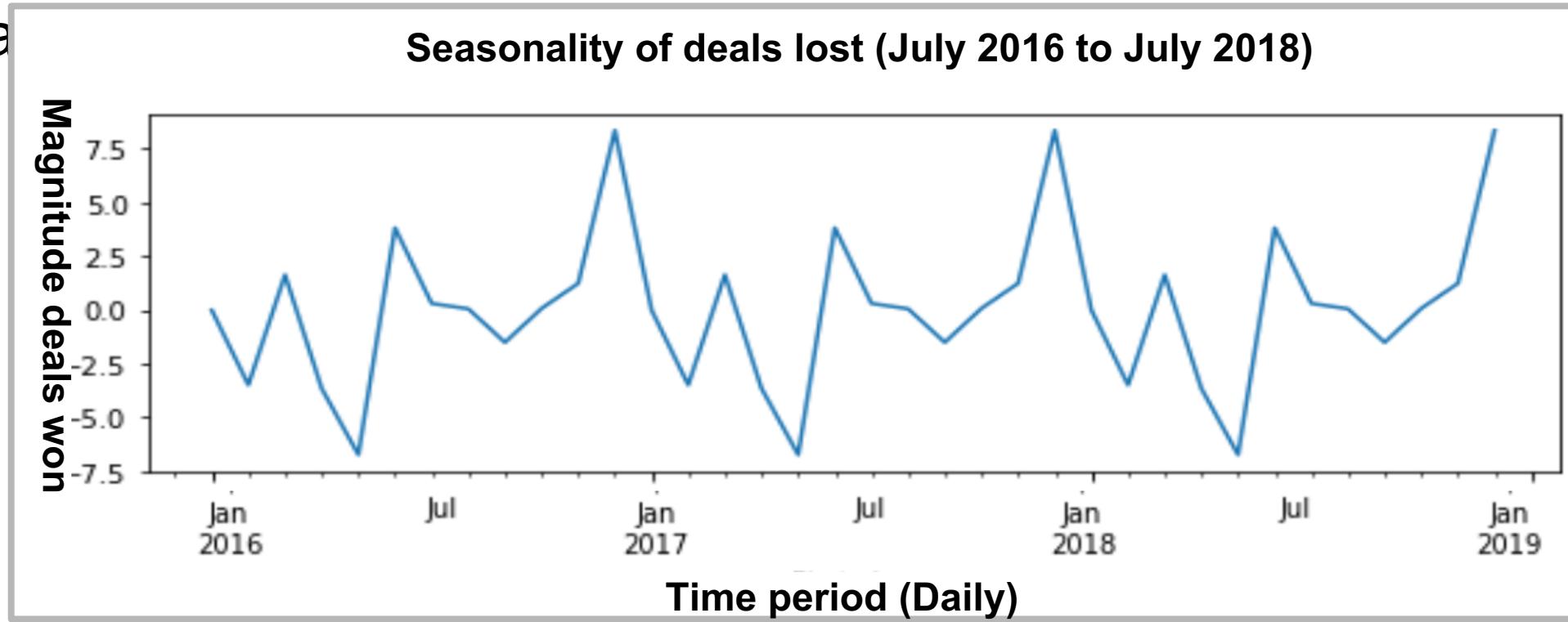




Deals Lost - Seasonality



June - June Yearly Seasonality Of Deals Lost Is Observed In The Data



- The amplitude of deals lost has the same seasonal pattern in the past 3 years with high volume of deals lost in the last quarter of every year





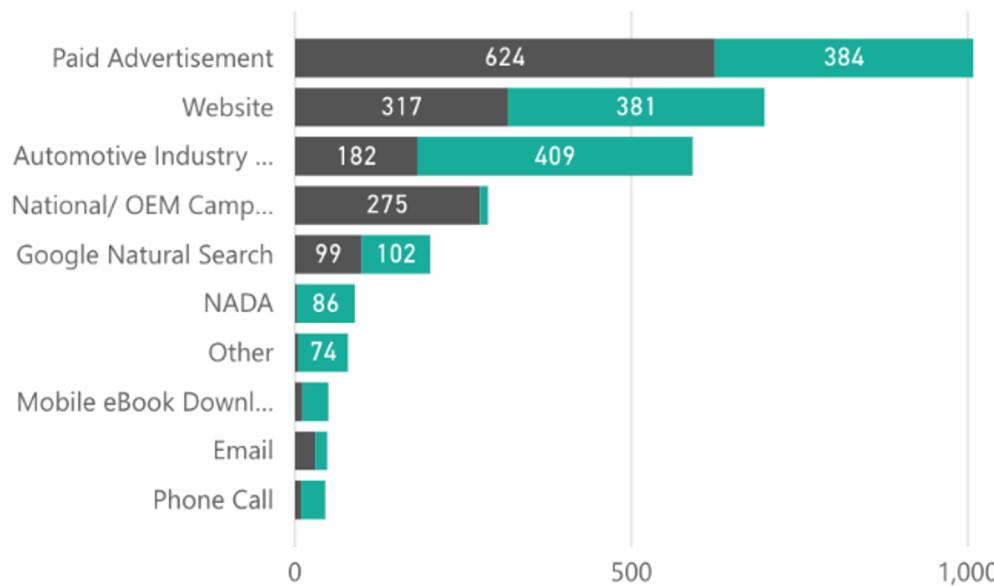
Leads Source



From Leads To Opportunities

Leads Source Distribution

Converted ● 0 ● 1



Leads Data

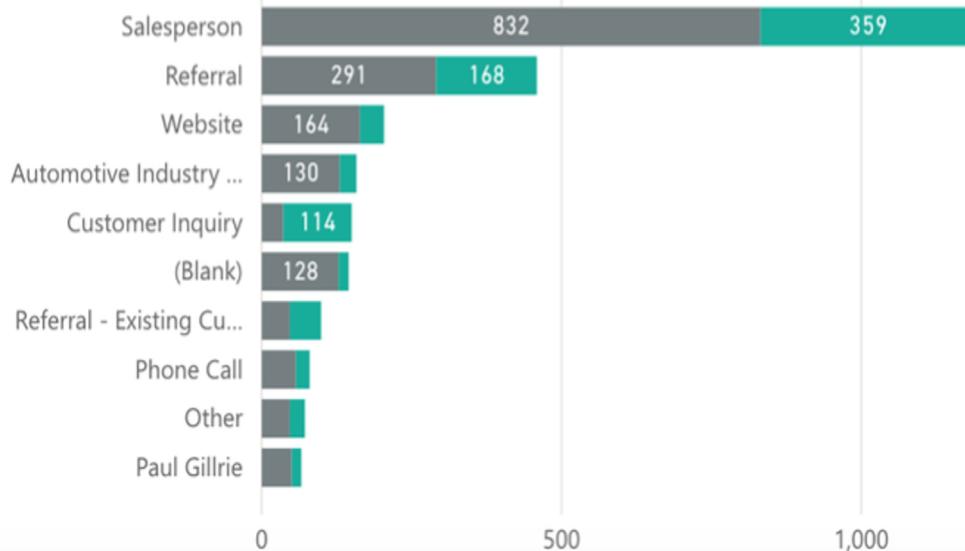
- High Conversion Rate: Automotive Industry Event, NADA
- High Conversion Speed: Paid Ads, Website, Automotive Industry Event, Google Natural Search
- More than half converted within only 1 week, most converted within 1 months



From Opportunities To Closed Won

Leads Source Distribution

Won ● 0 ● 1



Opportunities Data

- High Won Rate: Customer Inquiry, Referral, Sales Person
- High Conversion & Close Speed: NADA, Hiring eBook Download
- From leads to closed won: More than half closed within 3 months, most closed within 6 months

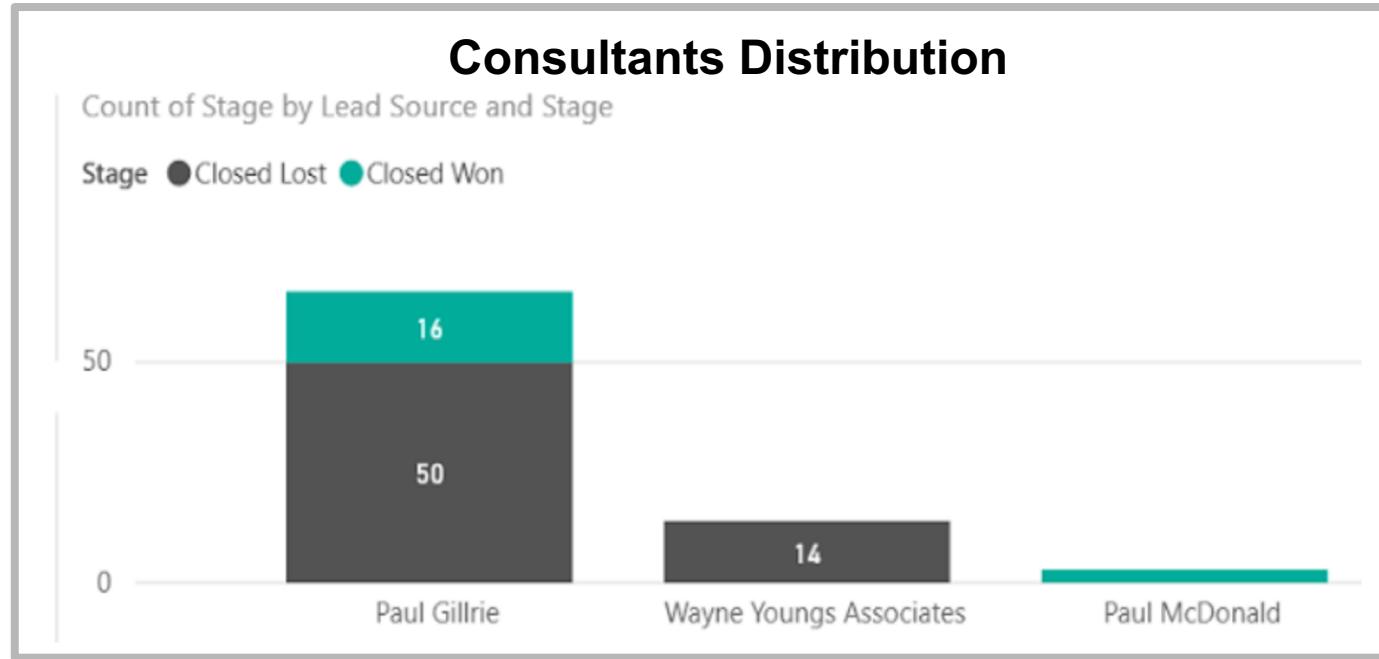




Consultants



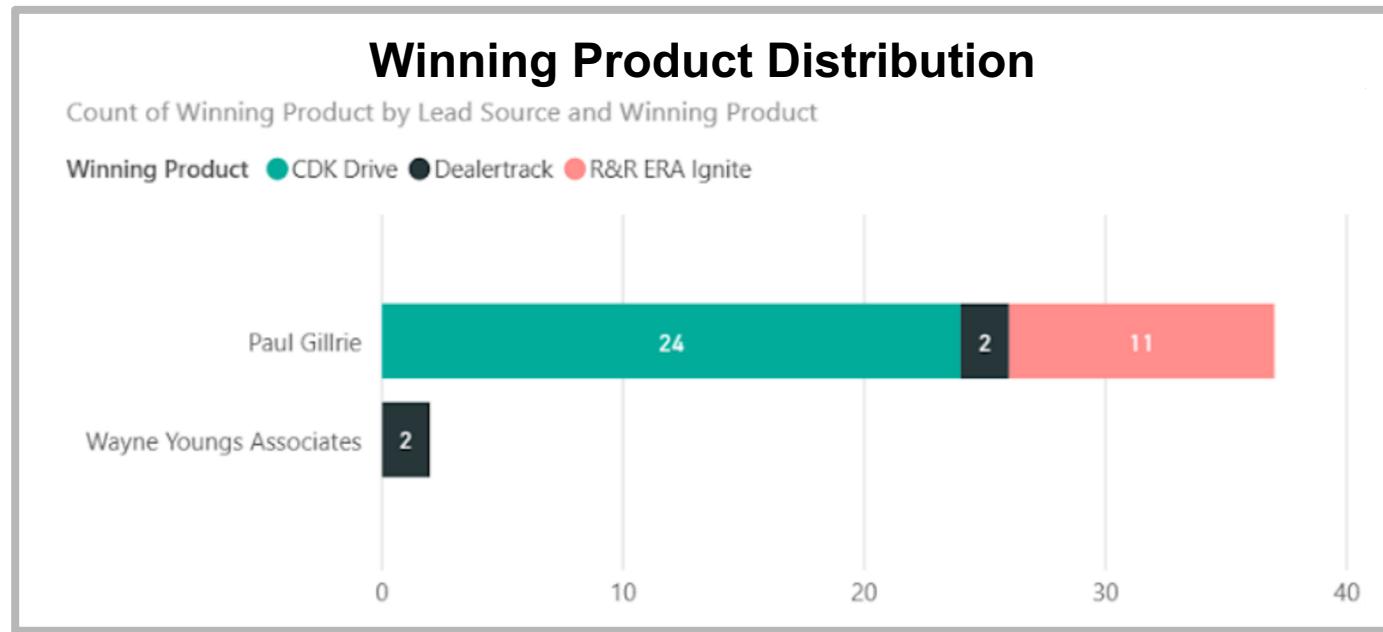
Consultants: Paul Gillrie, Paul McDonald, Wayne Youngs Associates



- Main consultants source: Paul Gillrie - 24% closed won
- All leads that are closed won have only 1 rooftop, leads from Wayne Youngs Associates have the highest rooftops (> 2) and we lost all of them



Consultants: Paul Gillrie, Paul McDonald, Wayne Youngs Associates



Main lost reason: “no change”

- Auto/Mate did not fit – chose CDK
- Up-fronts were too much to switch – chose DealerTrack
- No need to change – chose CDK
- Acquisition – chose CDK
- Re-signed with Reynolds – chose R&R



Campaigns



Summary about Campaigns Data

95799
campaigns

1407 unique
accounts id

4.1% closed won

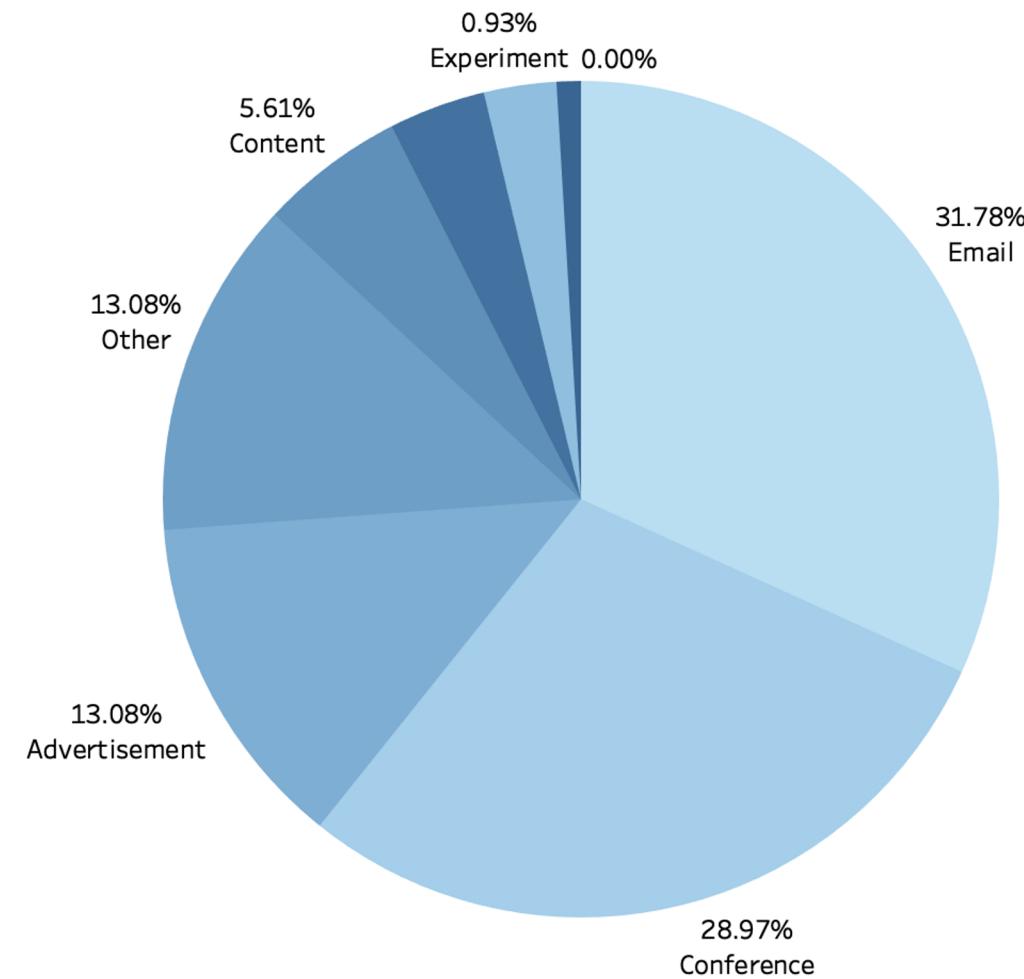


12.95% responded

224 accounts id
come to the final
stage



Top 5 Campaigns that Gain Most Responded Dealerships

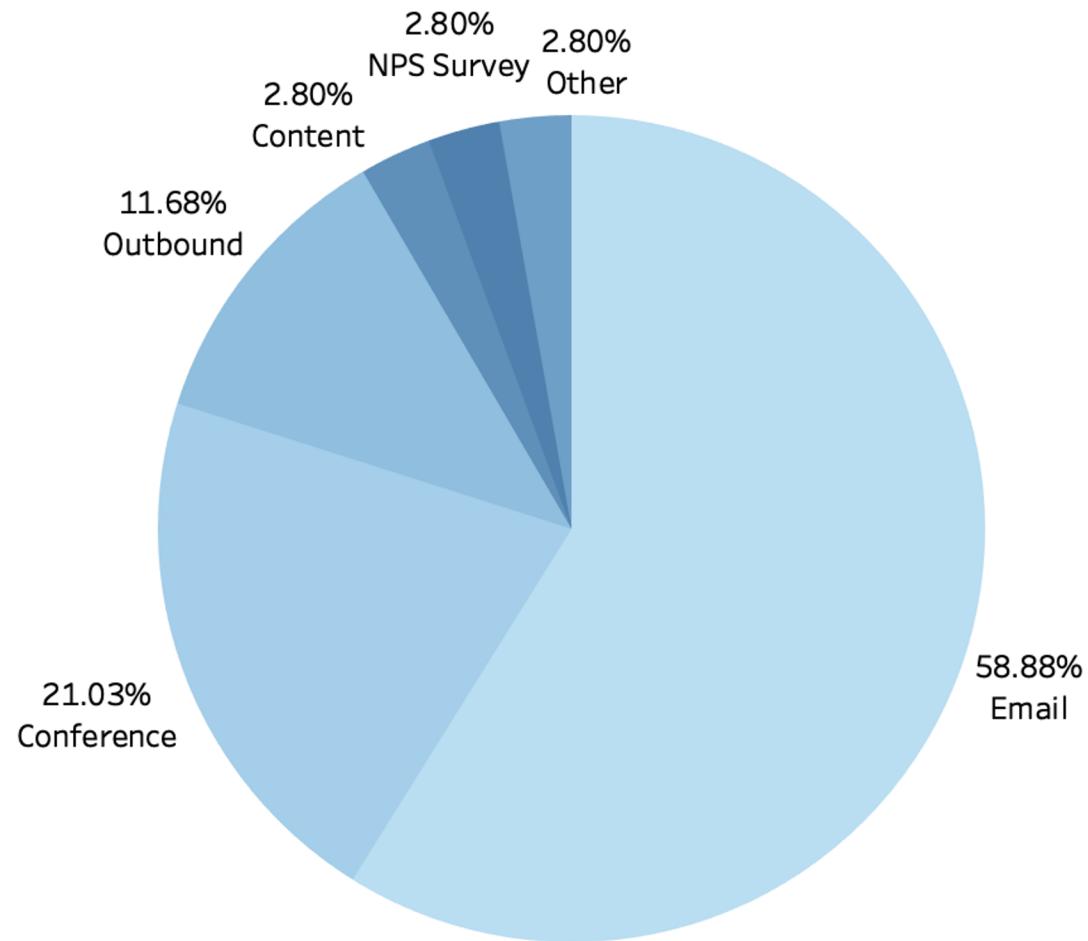


Top 5 campaigns

1. Email
2. Conference → 67.98% related to 'NADA'
3. Advertisement → 41.76% come from Google ads
4. Other → 56.27% come from contact and web
5. Content → 41.7% come from ebook



Top 5 Campaigns that Gain Most Closed Won Dealerships

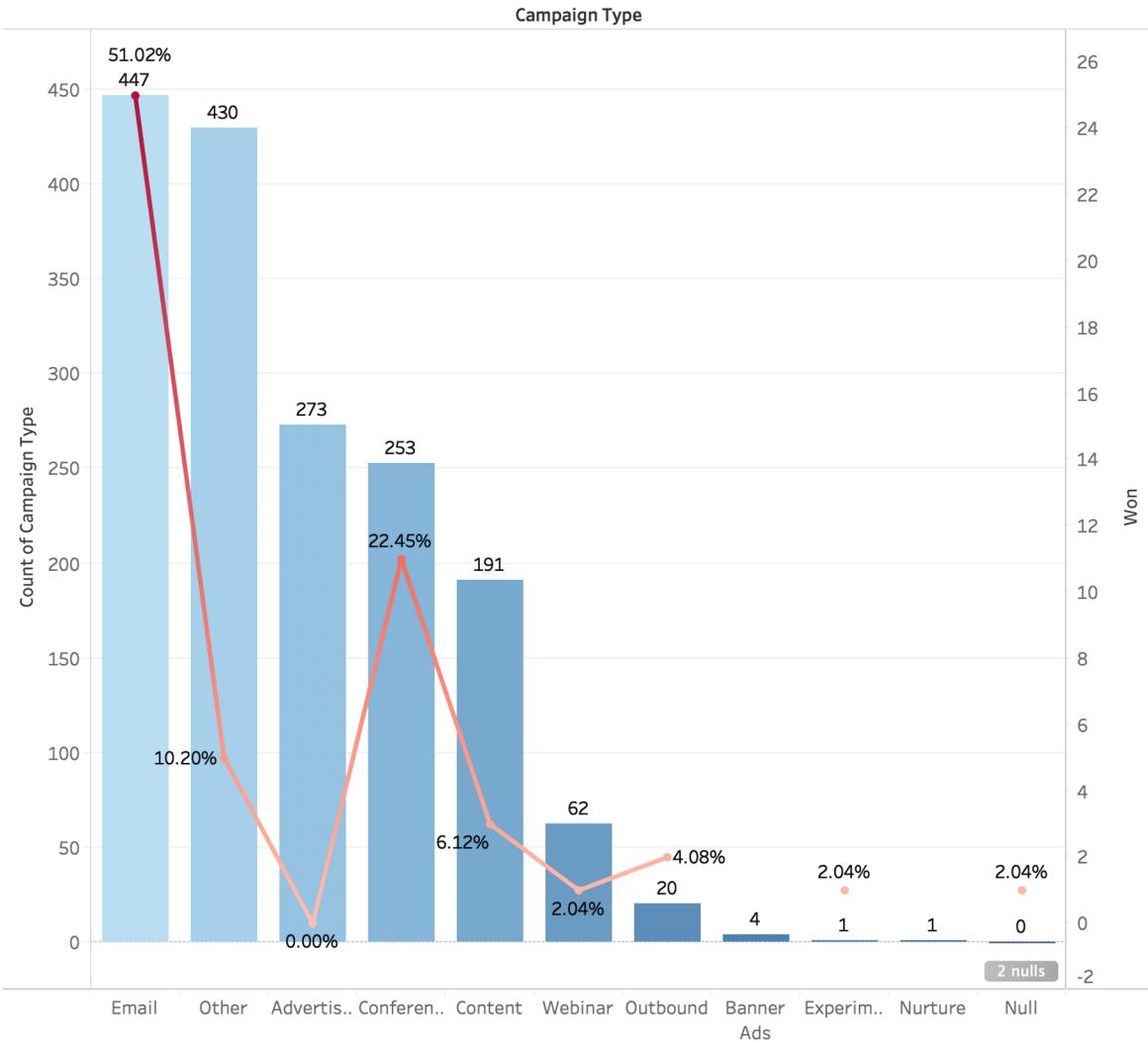


Top 5 campaigns

1. Email
2. Conference → 71.1% related to 'NADA'
3. Outbound → 88% come from outbound calling
4. Content
- NPS Survey
- Other



Comparation



Considering the number of conference the the percentage it contribute to closed won, conference is the best campaigns.

Considering the number and expense of advertisements, it is a campaign that not really useful.

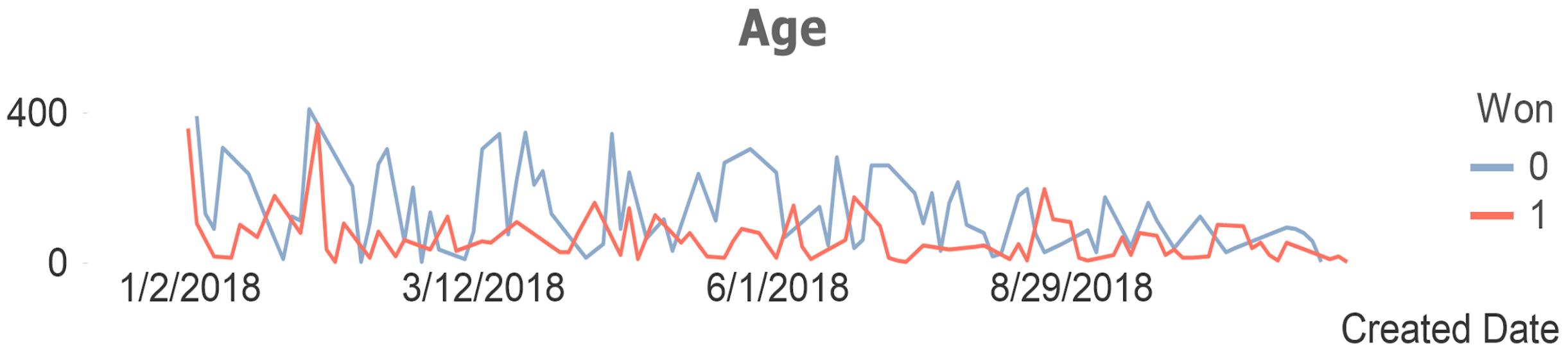




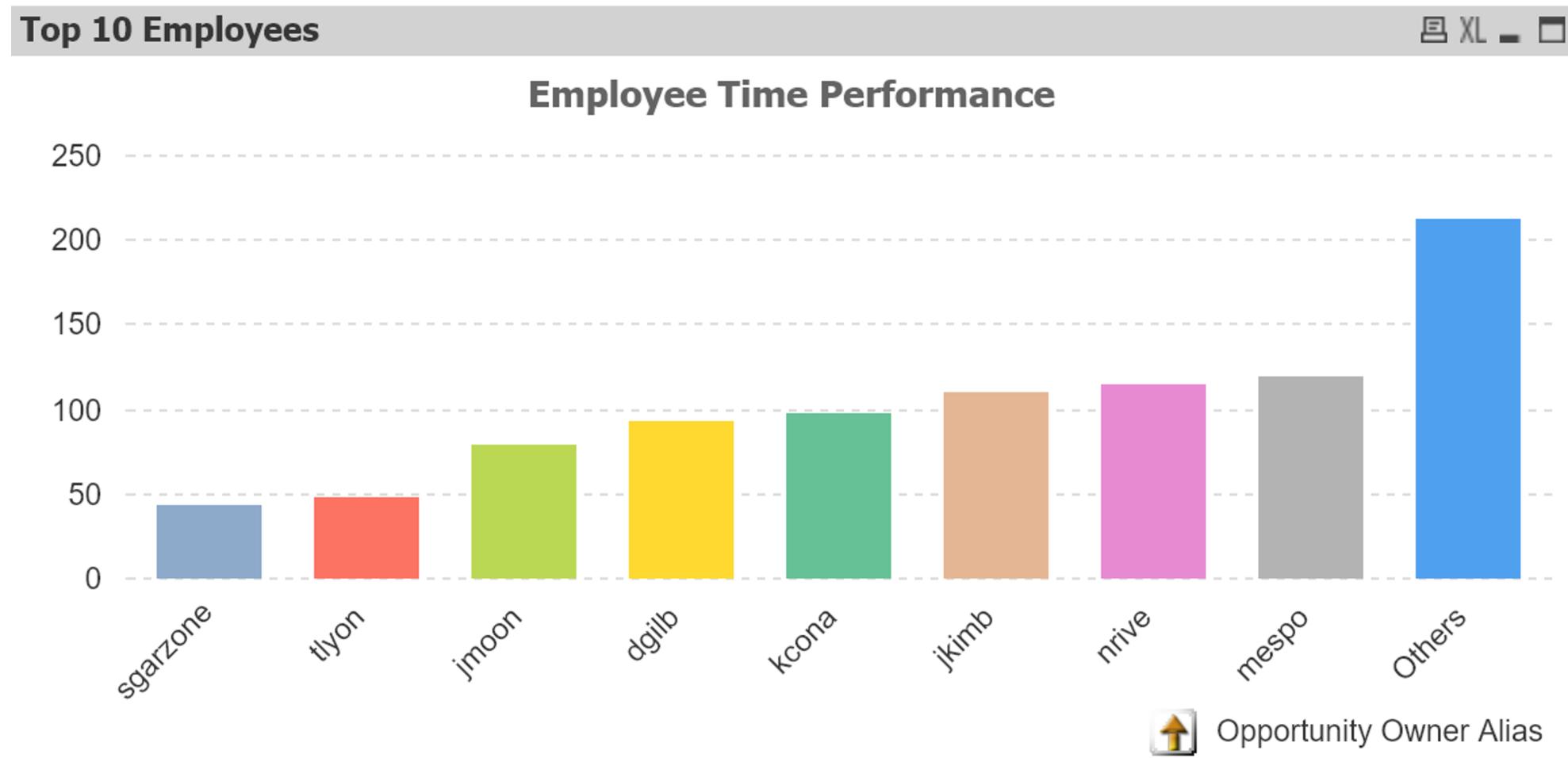
Employee Performance vs. Time Analysis



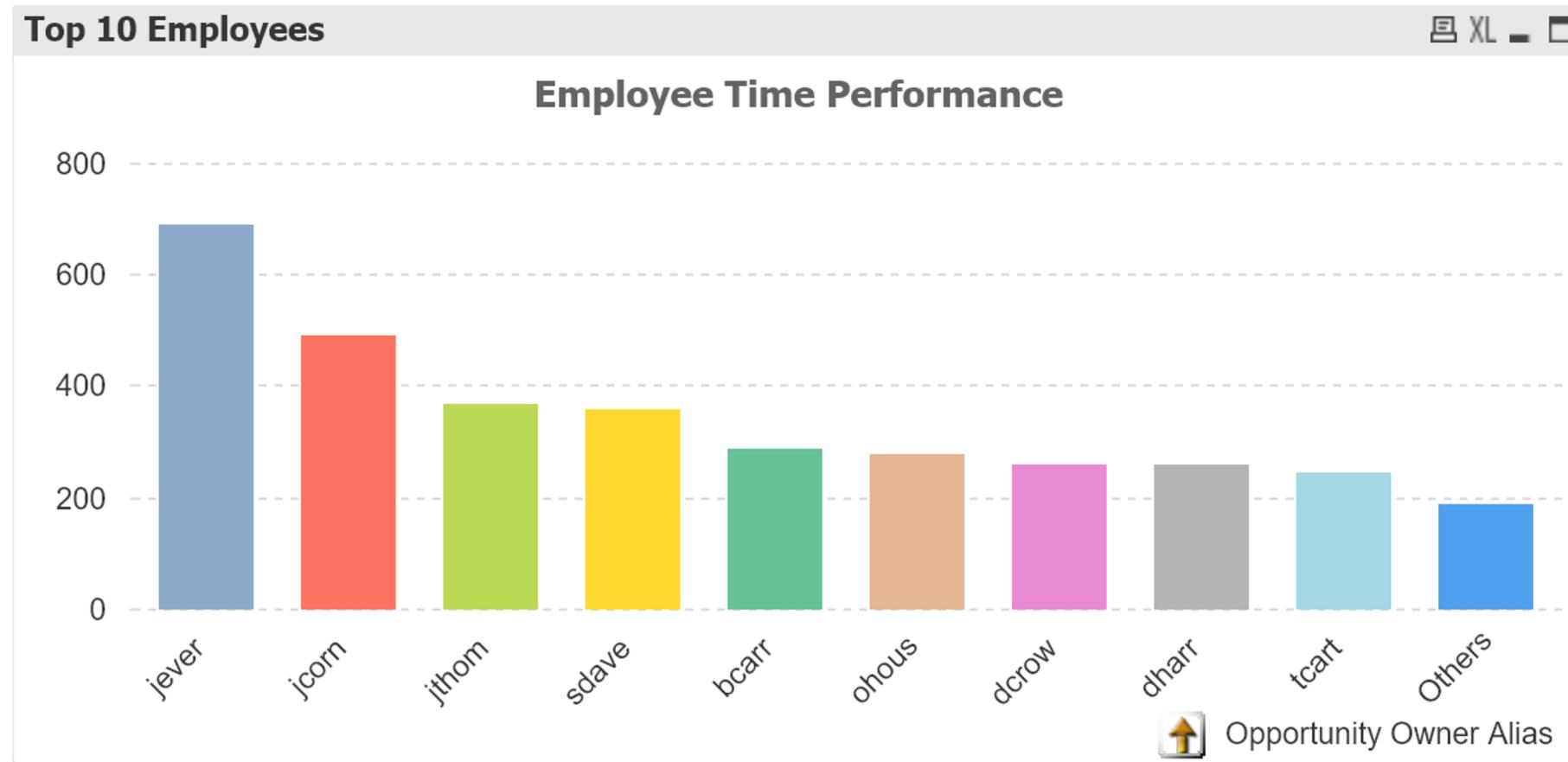
Employees Take Less Time to Close a Deal when it is Won



Fastest Employees



Slowest Employees





Lost Reason Analysis



2 Variables to Analyze Why Auto/Mate is Losing Deals

Lost Reason: No change, price, other, feature and their combinations.

Lost Reason Comments: Long strings without a pattern or structure.

Example

“Spoke again to Justine and they are going a different direction. Their executive team felt that we where not a good fit for them.”



Lost Reason Variable Shows that “No Change” and “Price” are important factors.

30% of all loss reasons
are “No Change” and its
combinations with other
factors.

17% of all loss reasons
are “Price” and its
combinations with other
factors.

Already
known!



How to Analyze Lost Reason Comments Variable?



A Pattern Emerged from the Comments: Upfront Payments

- They did not want to **pay for install**, felt they had only been off of the system for a little over a year and did not need or want to pay for training.
- ASI **dropped the upfronts** to \$12K and put them in a 2 year agreement. Dealer was given many opportunities to offer a counter to what we proposed. He refused to do so.
- **Upfront costs**...Staying with Frasier
- **Initial investment too much** for them. Going with DT who will do remote training for half the cost.



Payment System of Auto/Mate includes two types of payment.

Upfront Payments

- Installment
- Training

Monthly Payments

+ No binding contract,
continues as long as
they stay as a customer

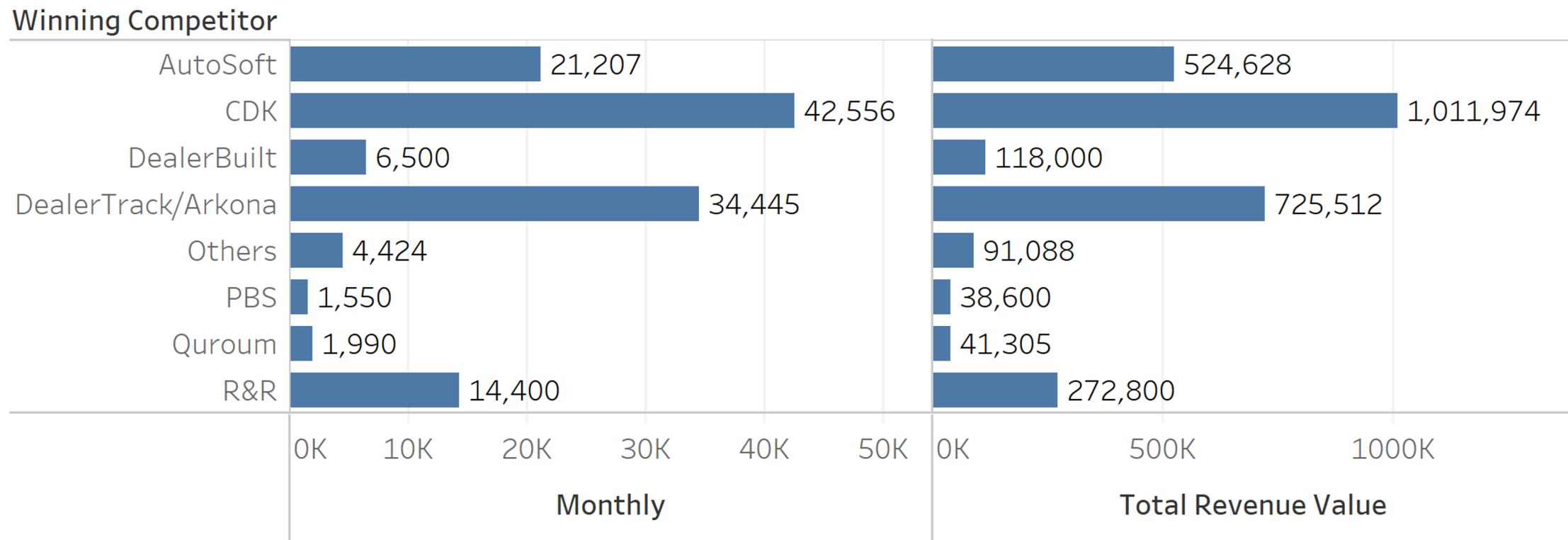
Total Revenue

Upfront + Monthly \times 12



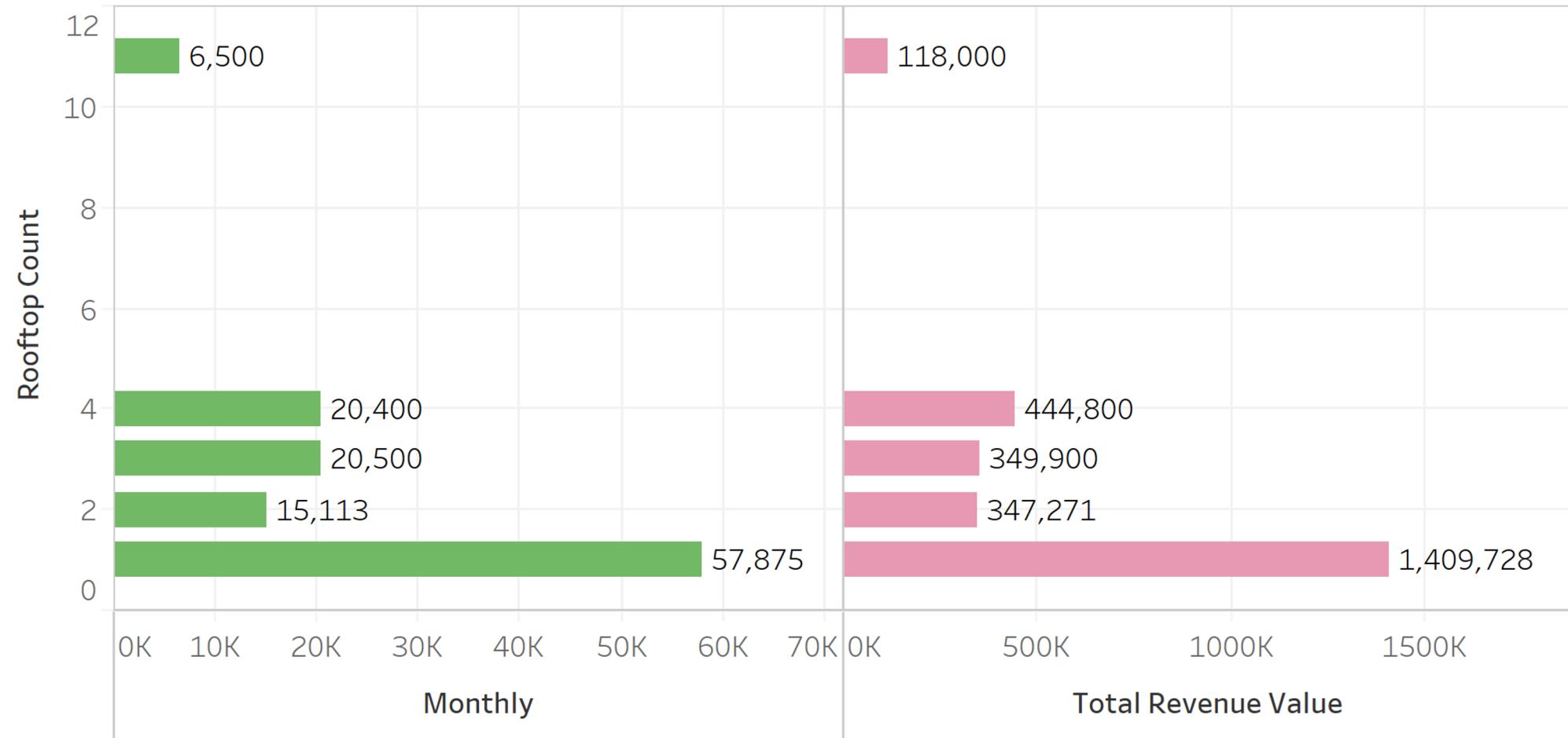
CDK, DealerTrack and Autosoft are lowering their upfronts to win deals.

Losses because of upfront payments



Mostly smaller auto dealers are having problems with upfront payments

Losses because of upfront payments vs. Rooftop Counts



Recommendation

Lower the upfront payments for small auto dealers to divide it into monthly payments.



Total Annual Revenue Gain

\$2,853,307





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