# What is Driving Policy Lapse?

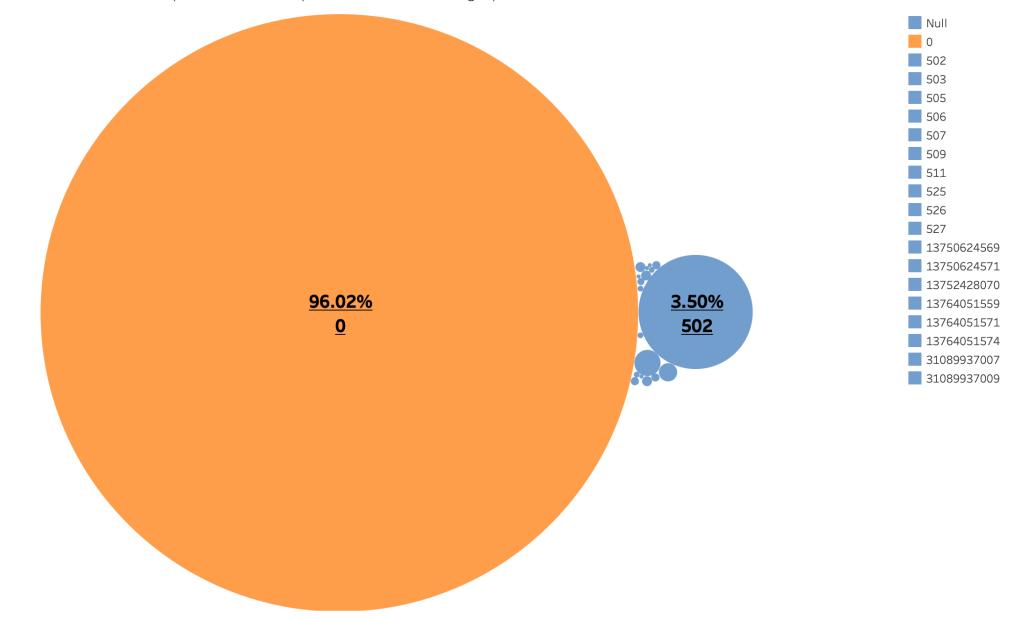
ISTE 782 Final Project

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# Creative Type '0': Our Primary Attraction

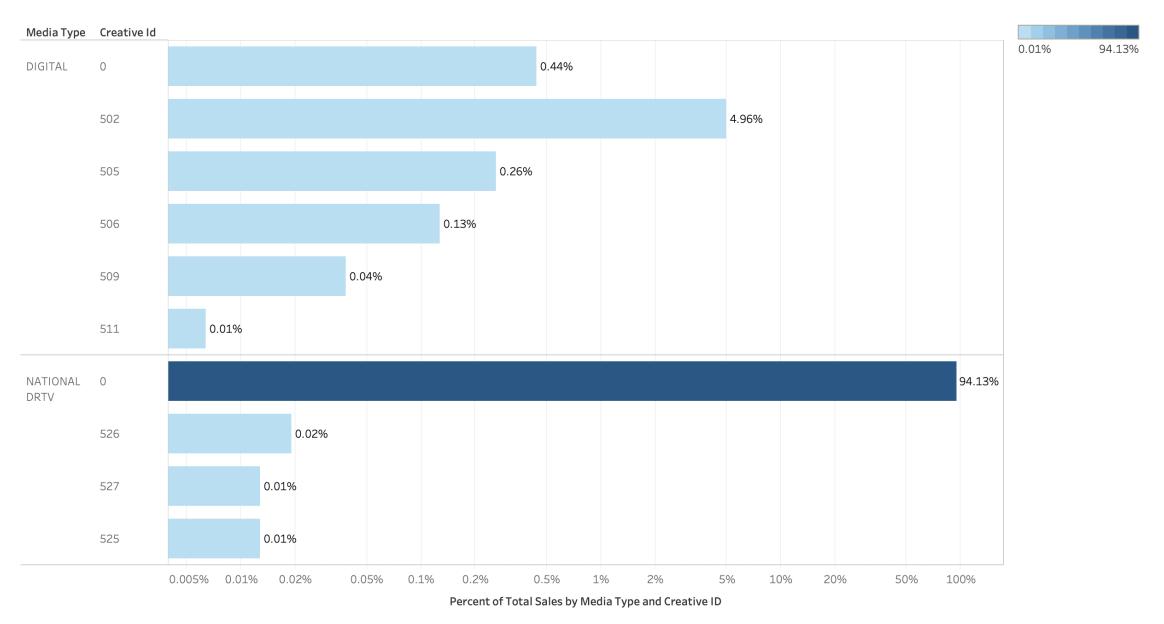
96% of our customers responded to this type of spot by initiating a policy. Therefore, we can expect that the majority of policy lapses are directly associated with this creative spot and that this spot is not what is driving lapses.



% of Total Count of Creative Id. The marks are labeled by % of Total Count of Creative Id. The marks are labeled by % of Total Count of Creative Id. Details are shown for Creative Id. Percents are based on the whole table.

#### National DRTV in Combination with Creative ID '0' Account for 94% of Initial Sales

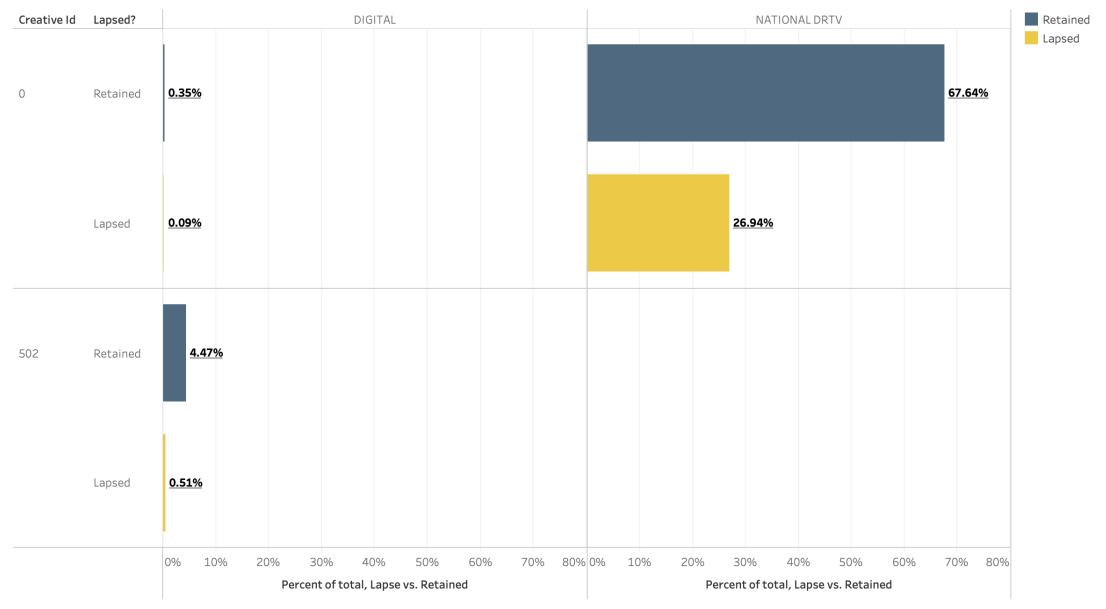
We can then expect that the great majority of our lapses are associated with this combination.



% of Total Count of Media Type for each Creative Id broken down by Media Type. Color shows % of Total Count of Media Type. The marks are labeled by % of Total Count of Media Type and Creative Id. The Media Type filter keeps DIGITAL and NATIONAL DRTV. The Creative Id filter excludes Null. Percents are based on the whole table.

# Many of our customers retain their policies, but 27% do not...

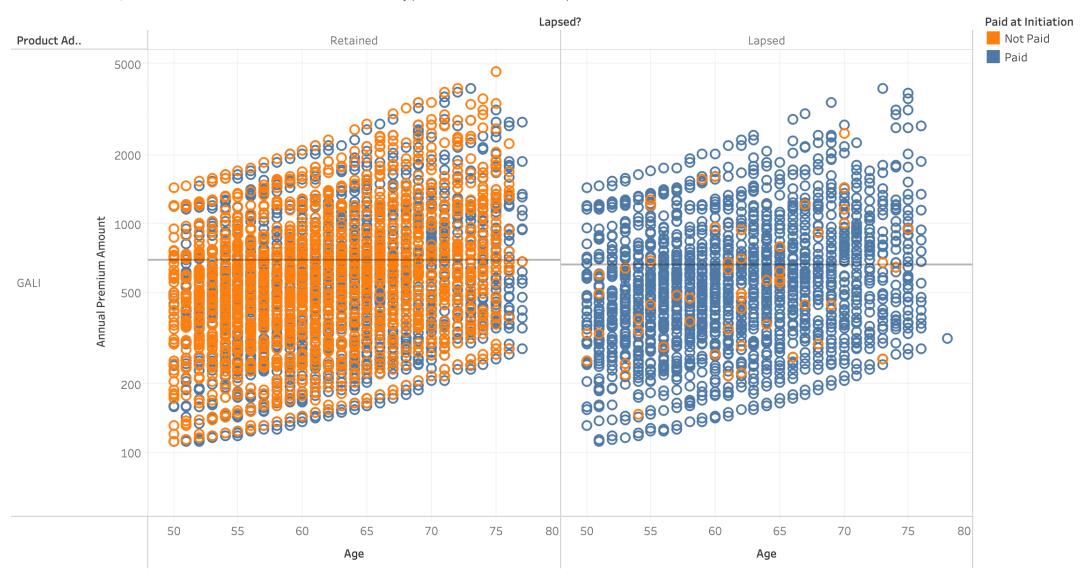
We can accept the hypothesis that policies influenced by Creative ID '0' on National DRTV account for the majority of lapses. Over the whole data, we see that just over 27% of policies were allowed to lapse, all but 0.6% of them from this combination. As this is the case, we cannot conclude that National DRTV or Creative Spot '0' directly influence policy lapse, as the combination already accounts for 95% of the available data.



% of Total Count of Lapse Flag for each Lapsed? broken down by Media Type vs. Creative Id. Color shows details about Lapsed?. The view is filtered on Creative Id and Media Type. The Creative Id filter keeps 0 and 502. The Media Type filter keeps DIGITAL and NATIONAL DRTV. Percents are based on the whole table.

#### Lapsed Policies Tend to be Initiated With a Payment

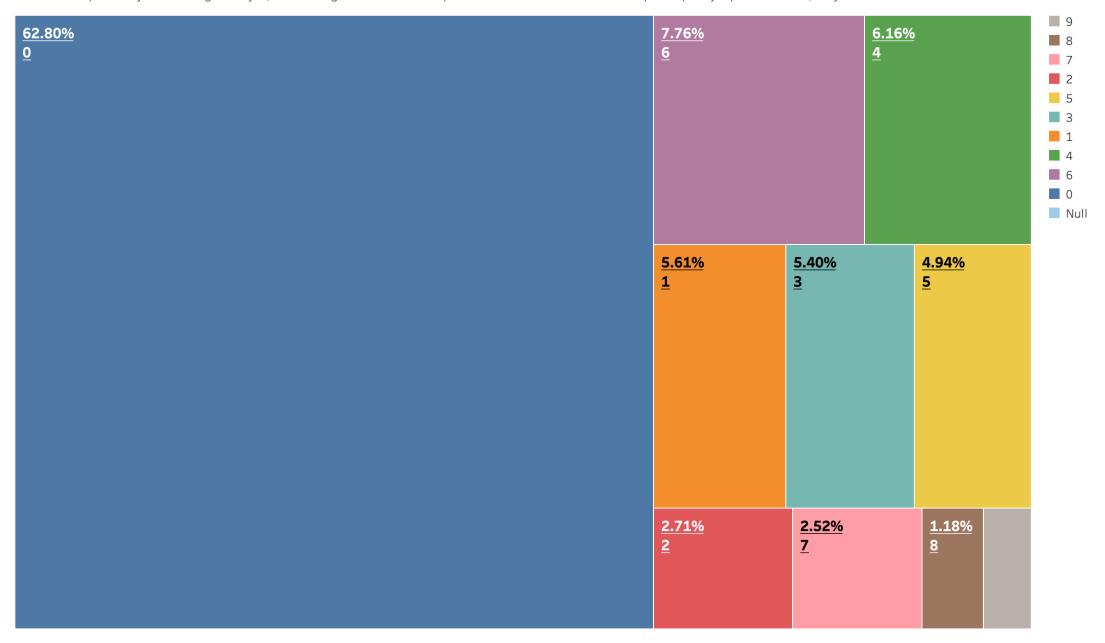
Something unexpected is clear from this graphic: policies paid at initiation tend to lapse while those that were not, tend to be retained. Retained policies had an average annual premium of \$693, while lapsed policies had an average annual premium of \$663. We also see the distribution by age, and it is clear that on the whole, no age group lapses more than any other in any significant way. It is also important to note that this data is filtered by Creative ID's 0 and 502, and Media Types Digital and national DRTV; over that entire combination we see that the only product advertised and responded to was GALI.



Age vs. Annual Prem Amt at Origination broken down by Lapsed? vs. Product Advertised. Color shows details about Paid (copy). Details are shown for Paid (copy). The data is filtered on Creative Id and Media Type. The Creative Id filter keeps 0 and 525. The Media Type filter keeps NATIONAL DRTV. The view is filtered on Lapsed?, Paid (copy) and Product Advertised. The Lapsed? filter keeps Retained and Lapsed. The Paid (copy) filter keeps Not Paid and Paid. The Product Advertised filter keeps GALI.

# Something to Consider

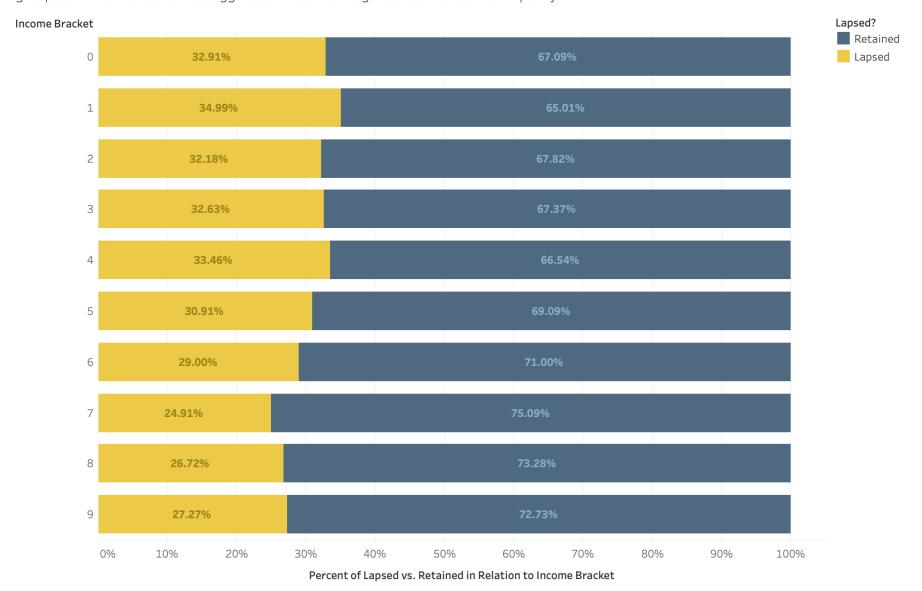
Income Group '0' is by far our largest buyer, accounting for 62.8% of new policies. Could this be our main culprit in policy lapses and if so, why? Let's find out...



% of Total Count of Income Bracket and Income Bracket. Color shows details about Income Bracket. Size shows % of Total Count of Income Bracket. The marks are labeled by % of Total Count of Income Bracket and Income Bracket. Percents are based on the whole table.

#### Lapse to Retention Ratio is Consistent

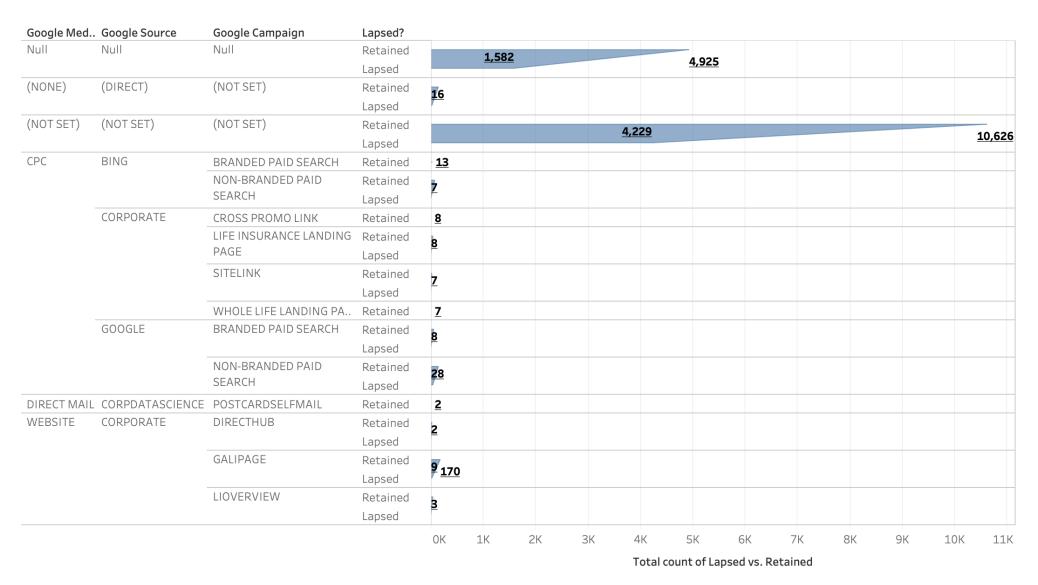
But as household income gets higher, there is more policy retention. It appears that for some reason (perhaps financial), income groups labelled 4 and under struggle at an above average rate to maintain their policy.



% of Total Count of Lapsed? for each Income Bracket. Color shows details about Lapsed? The data is filtered on Initial Payment Date Year, Product Advertised, Initial Payment Date Year and Creative Id. The Initial Payment Date Year filter keeps 2016, 2017 and 2018. The Product Advertised filter keeps GALI. The Initial Payment Date Year filter excludes 2016. The Creative Id filter keeps 0. The view is filtered on Lapsed? and Income Bracket. The Lapsed? filter keeps Retained and Lapsed. The Income Bracket filter excludes Null.

# Most Customers Were Not Acquired Through an Internet Medium

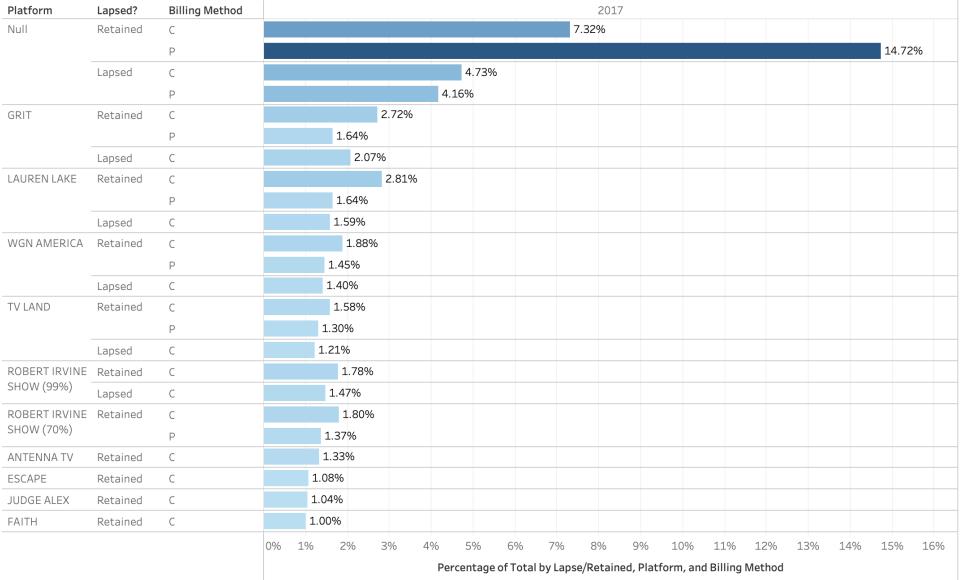
We see here that for the great majority of our data, the Google identifiers are either null or not set, which means that the customers were not influenced by an internet source. Therefore, the Google variables have no bearing or influence on policy lapse.



Count of Lapsed? for each Lapsed? broken down by Google Medium, Google Source and Google Campaign. The data is filtered on Paid (copy) and Creative Id. The Paid (copy) filter keeps Not Paid and Paid. The Creative Id filter keeps 0 and 502. The view is filtered on Lapsed?, which keeps Retained and Lapsed.

# Advertisement Platform and Initial Billing Method Are Also Non-Factors

Looking at the percentages of the total data, we see consistency yet again. Of course certain platforms account for more of the data than others, but each generally (within a few percentage points) holds true to the 26% percent lapse rate. The same can be said on the further breakdown by Initial Billing Method.

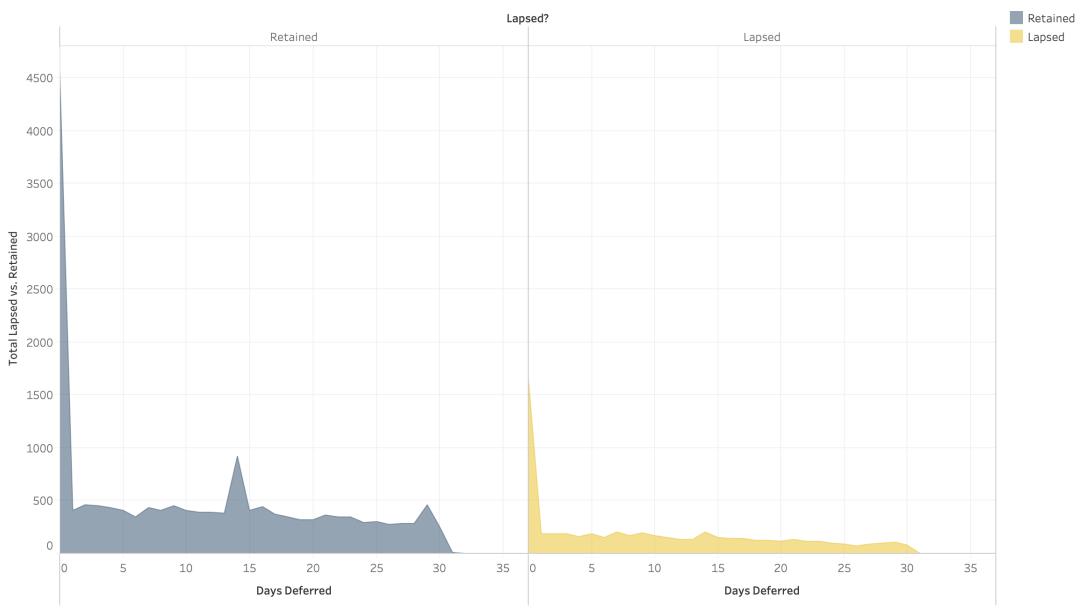


% of Total Count of Lapse Flag for each Billing Method broken down by Initial Payment Date Year vs. Platform and Lapsed?. Color shows % of Total Count of Lapse Flag. The data is filtered on Creative Id, which keeps 0. The view is filtered on Lapsed?, Initial Payment Date Year, Billing Method and % of Total Count of Lapse Flag. The Lapsed? filter keeps Retained and Lapsed. The Initial Payment Date Year filter keeps 2017. The Billing Method filter keeps C and P. The % of Total Count of Lapse Flag filter includes values greater than or equal to 1.00%. Percents are based on each column of the table.

1.00% 14.72%

# Do Total Days Deferred Matter?

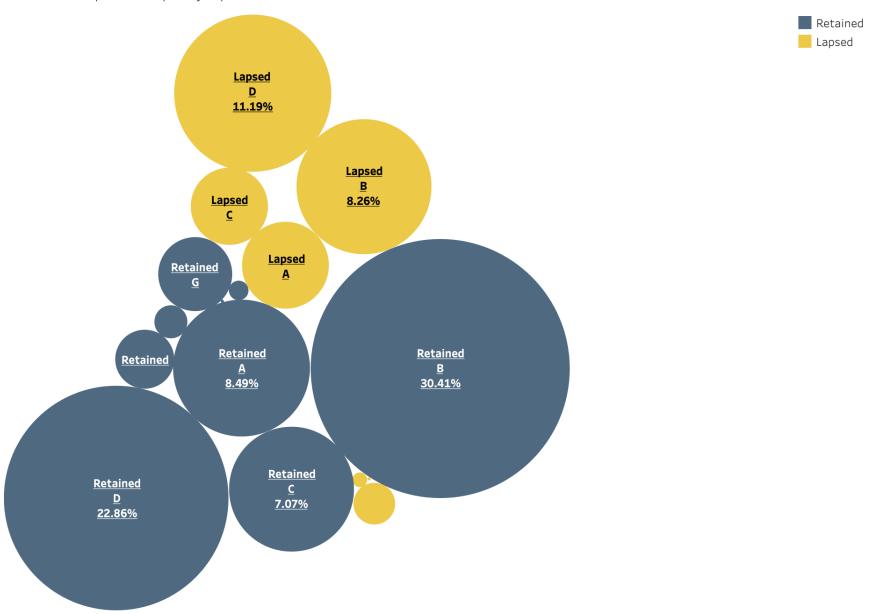
Again, the 25% lapse rate holds generally true when looking at lapse vs. retention over total days that payment was deferred. Thus, days deferred is not a determining factor in whether or not a policy will lapse.



The plot of count of Lapsed? for Days Deferred broken down by Lapsed?. Color shows details about Lapsed?. The data is filtered on Creative Id and Days Deferred as an attribute. The Creative Id filter keeps 0 and 502. The Days Deferred as an attribute filter ranges from 0 to 35.

#### Is the Call Center the Problem?

Again, the trend holds true. There appears to be no significant change from our 25% lapse rate to any one specific call center, thus eliminating specific call center service as impetus for policy lapse.



Lapsed?, Call Center and % of Total Count of Lapse Flag. Color shows details about Lapsed?. Size shows % of Total Count of Lapsed?. The marks are labeled by Lapsed?, Call Center and % of Total Count of Lapse Flag. The view is filtered on Lapsed?, which keeps Retained and Lapsed. Percents are based on the whole table.

# Conclusions

- There is not more than one identifiable factor in the given data that appears to be driving policy lapse or retention in a significant way.
- Policies that are initiated with a payment lapse at a very high rate as opposed to those that are paid after acceptance. Should we find a way to coerce customers into waiting to make the first payment until acceptance?
- We see larger lapse rates in income groups 4 and lower, let's find a way to appeal to higher income households. Although we see these higher rates, they are not large enough to skew the data.
- On average, it appears as if we can expect to see a 25-30% lapse rate across the board. We need to find out if this a natural lapse rate across the industry or a rate unique to our company.
- If it is a natural lapse rate, the best course of action is to run successful campaigns aimed at increasing policy sales to higher income consumers.