

# SUNY New Paltz Business Analytics Presentation

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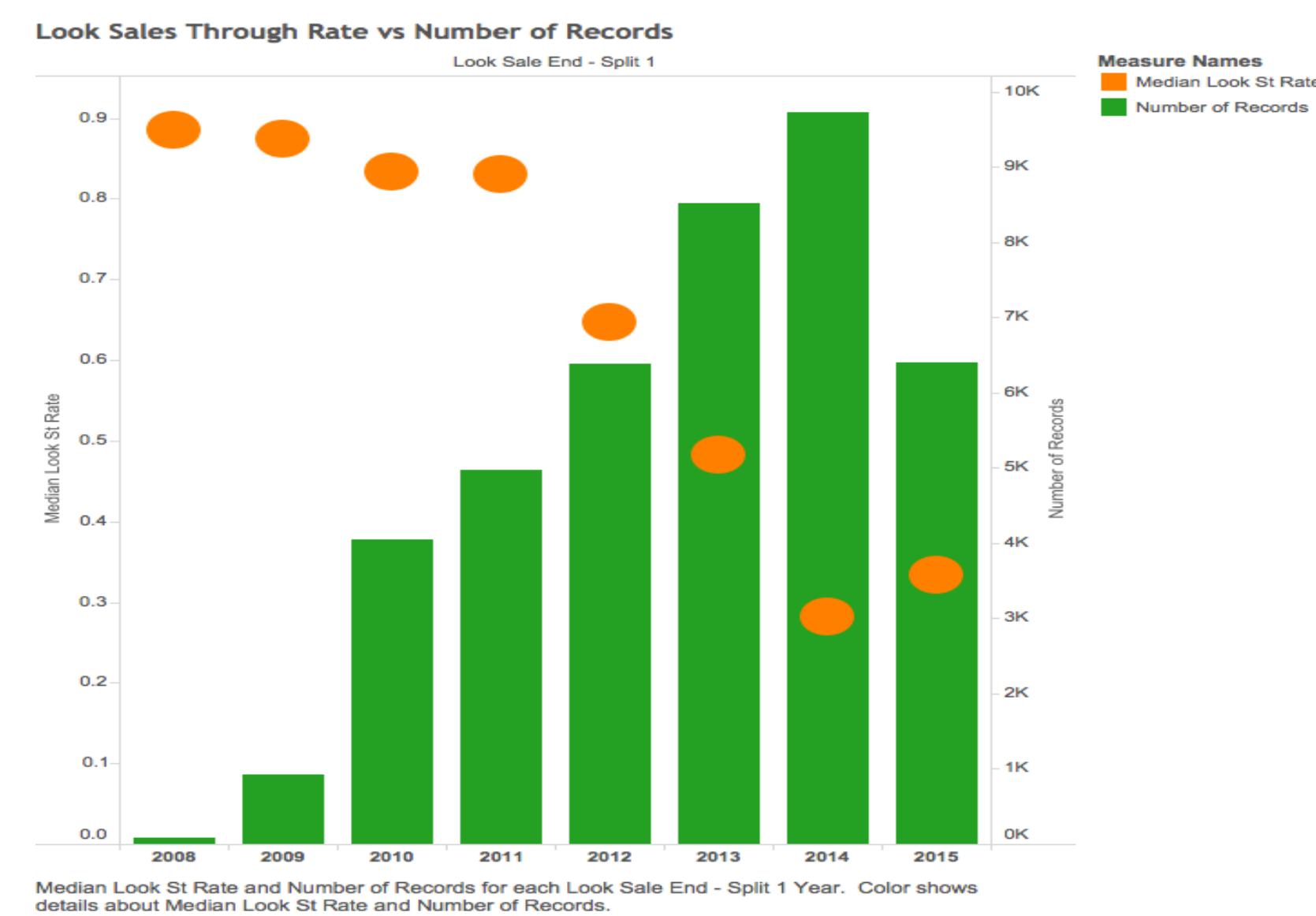


## Introduction: About Gilt

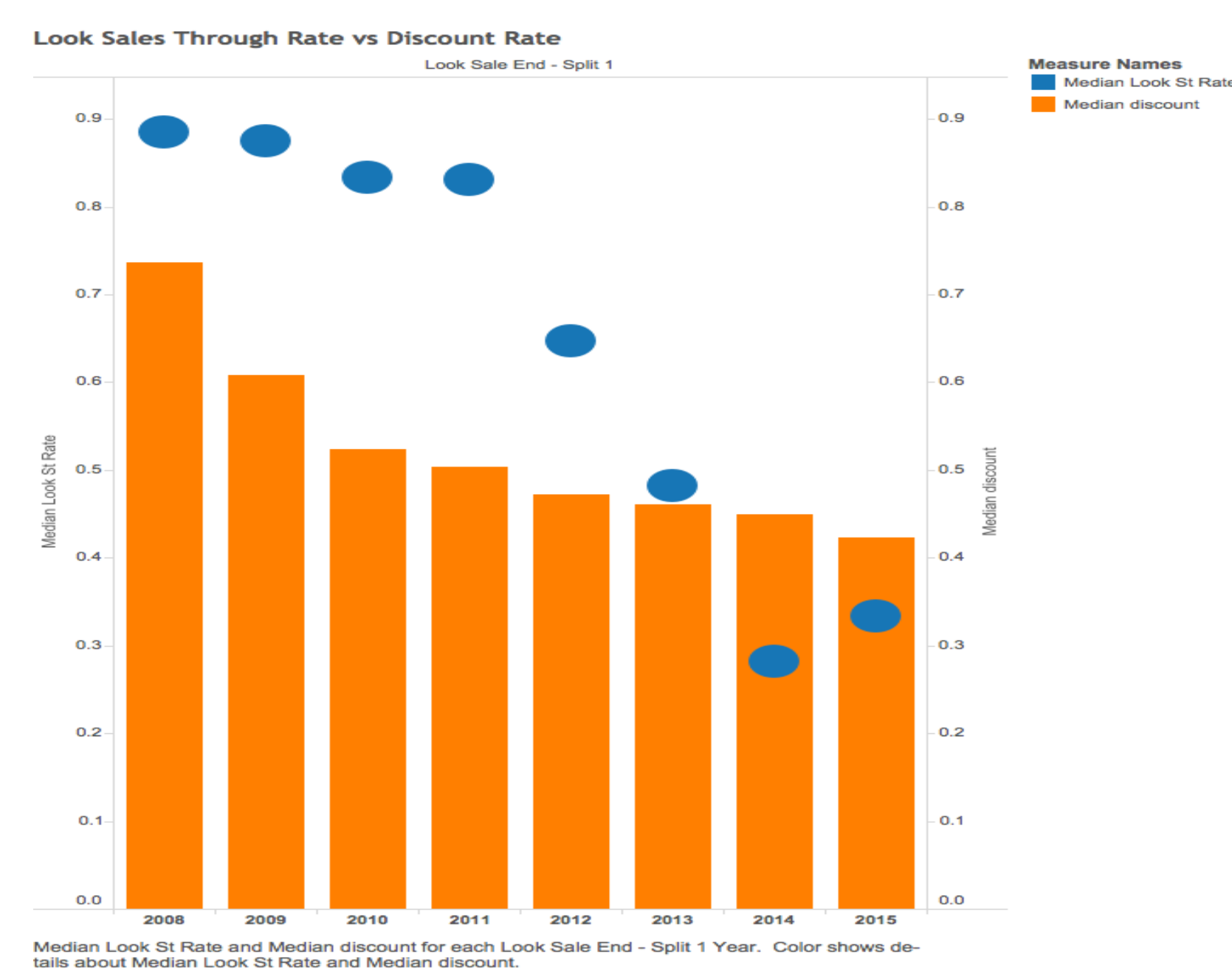
Gilt is a large online shopping website based in the United States that sells high end clothing at discount prices, primarily to women. In order to use Gilt, one has to sign up via email. Gilt uses these emails to inform customers of their frequent sales, which last anywhere from 4 or 5 minutes to 2 weeks. While Gilt was valued as high as \$1 Billion at one time, it actually sold for only \$250 Million in January 2016 (Wikipedia, "Gilt Groupe"). Clearly, something went very wrong at some point for Gilt. The question is, what exactly happened?

## Declining Look Sales Through Rate

Perhaps Gilt's greatest issue is one that has plagued numerous companies: they simply got away from what made them special. While they were initially known for selling high end women's clothing at high discount rates, they eventually expanded into the world of men's clothing at significantly lower discount rates. The effect was that Gilt sold more products overall, but its Look Sales Through Rate, which was once very high, sharply declined:



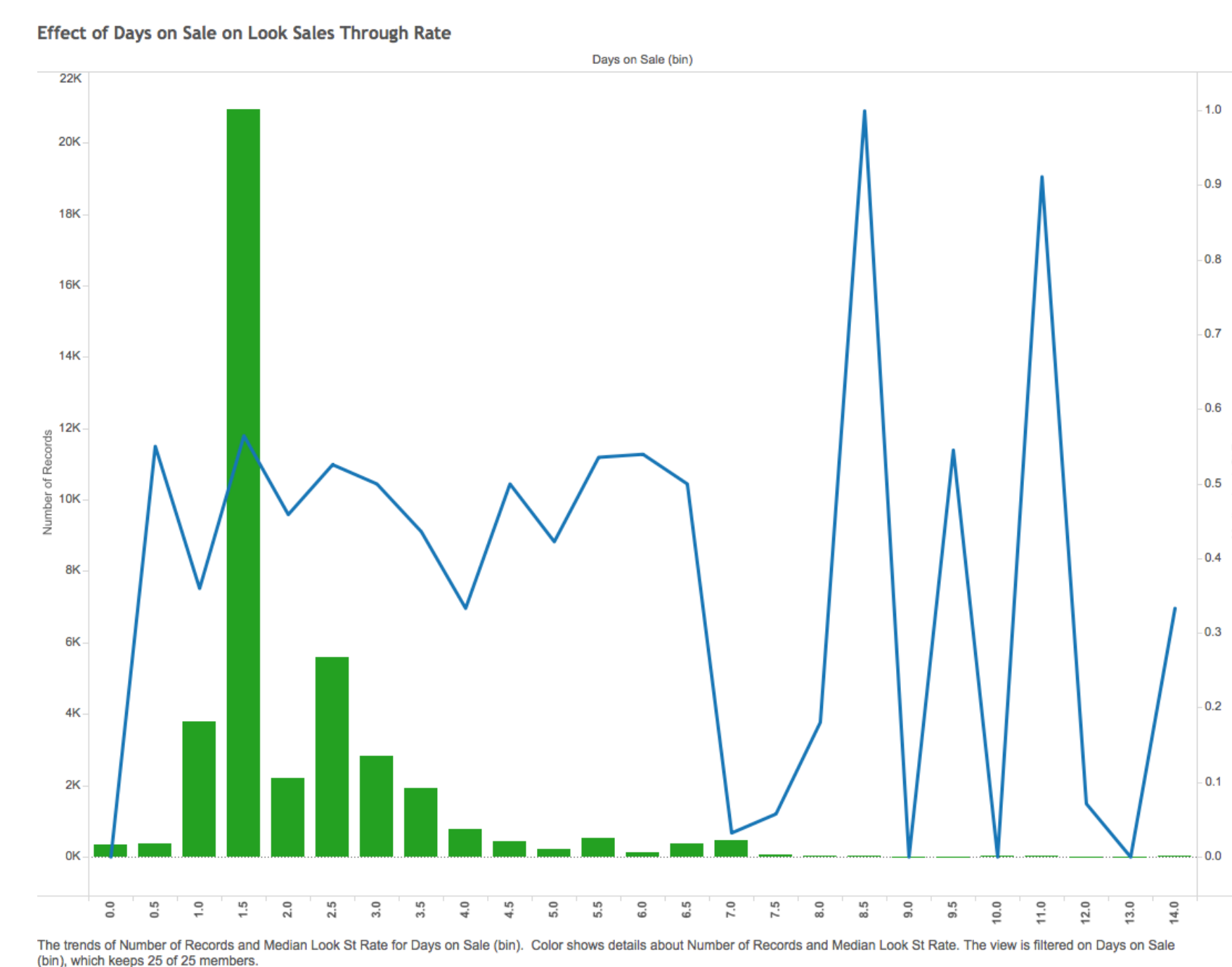
## Declining Discount Rate



As Gilt's declining Look Sales Through Rate indicates, customers were clearly unhappy with the company's less appealing discount rates.

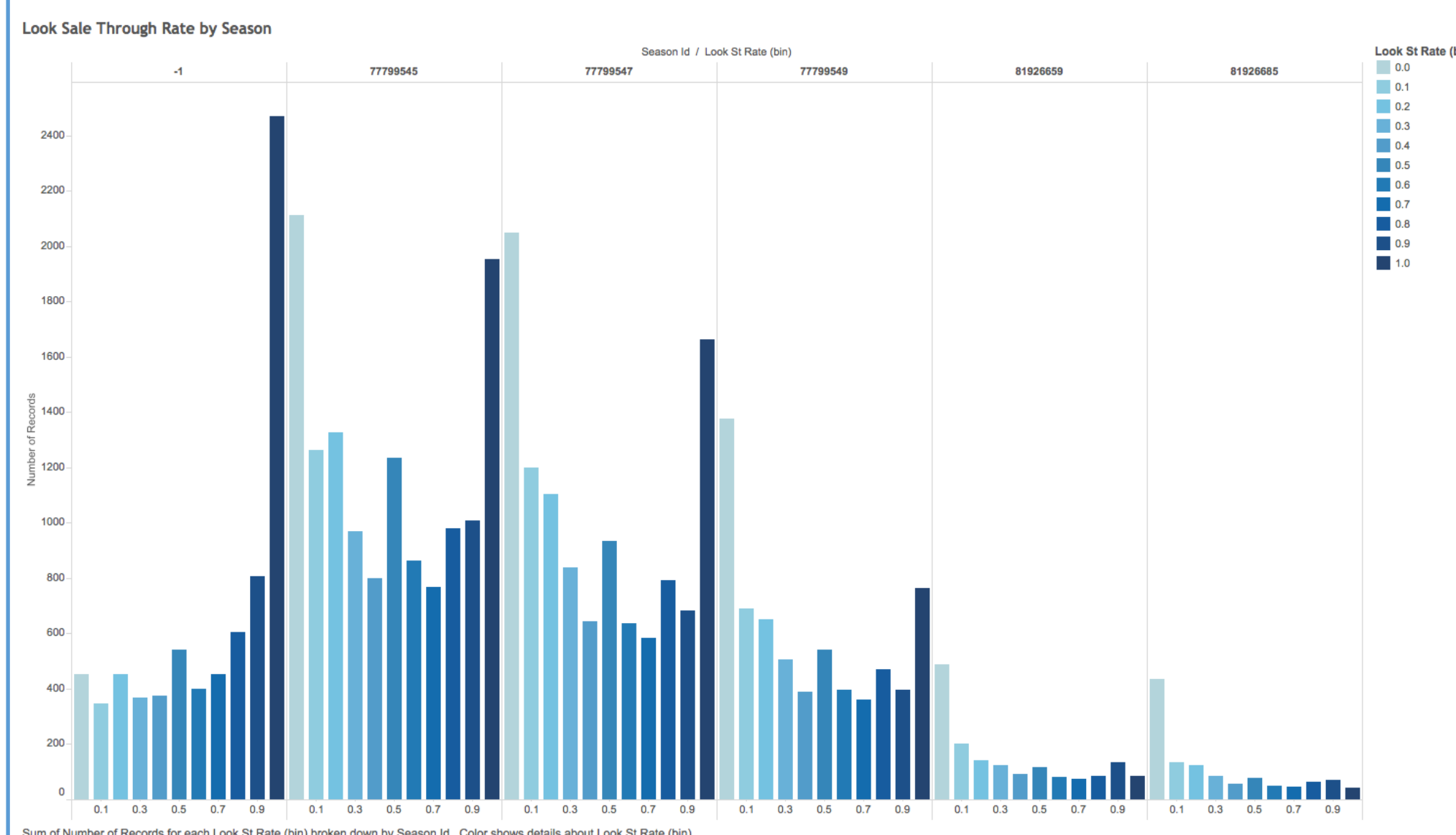
## Days on Sale

While declining discount rates and an expansion of product offerings have a negative effect on Gilt's Sales Through Rates, some factors are less obvious. To find these factors, we used a combination of analytical methods, including linear regression and CART models, to find some factors that also had a significant impact on Look Sales Through Rate:



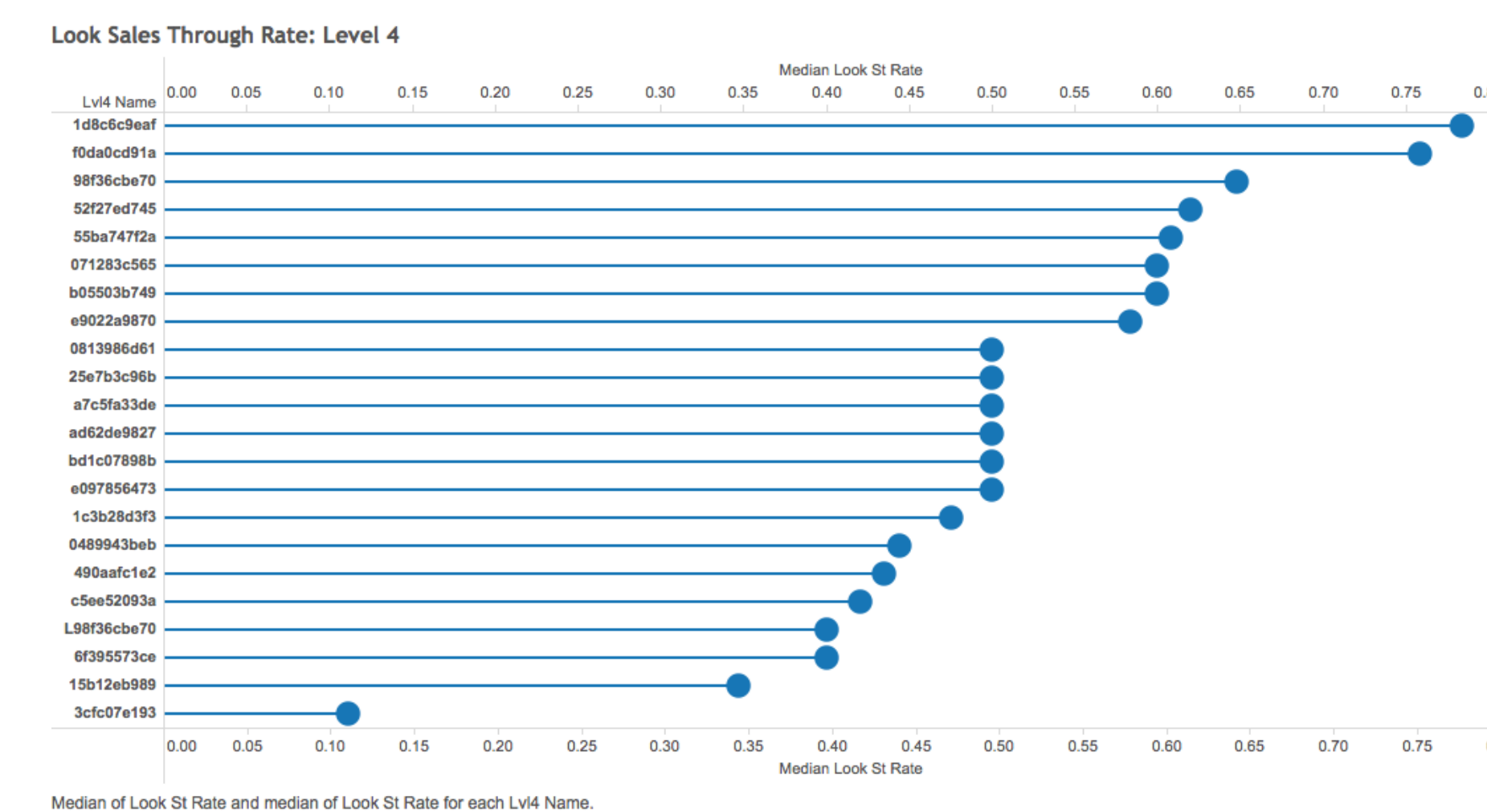
Days on Sale actually has a big impact on Look Sales Through Rate: anything over 7 Days has extreme variation, and anything below 0.5 has a median Look Sales Through Rate of 0. Therefore, Gilt's ideal sales time should be 12 hours- 7 days, while the "hot spot" that features the best combination of overall sales and Sales Through Rate is 1.5 days.

## Season

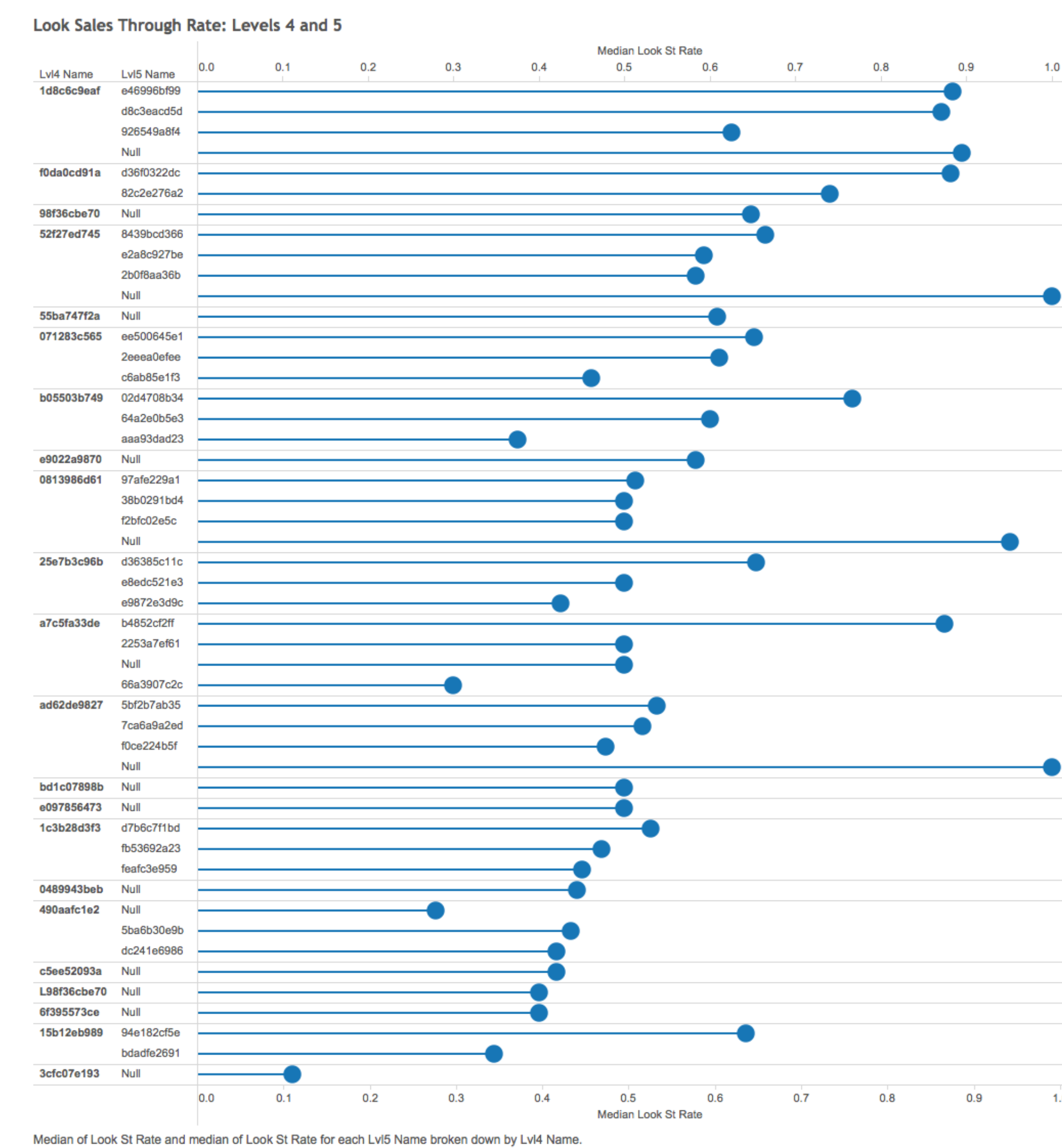


This graph shows the Look Sales Through Rate and Number of Records by season. Clothes from some seasons, such as season -1, fare much better than clothes from other seasons, such as season 81926685. Therefore, Gilt should probably focus on selling clothing items from better performing seasons and either discontinue or severely limit sales of clothing in worse performing seasons. Season -1 is clearly the best season and should be the most utilized by Gilt, while Seasons 81926685 and 81926659 can possibly be discontinued or restricted due to their relatively low level of sales and their poor Sales Through Rate performance.

## Number of Clicks

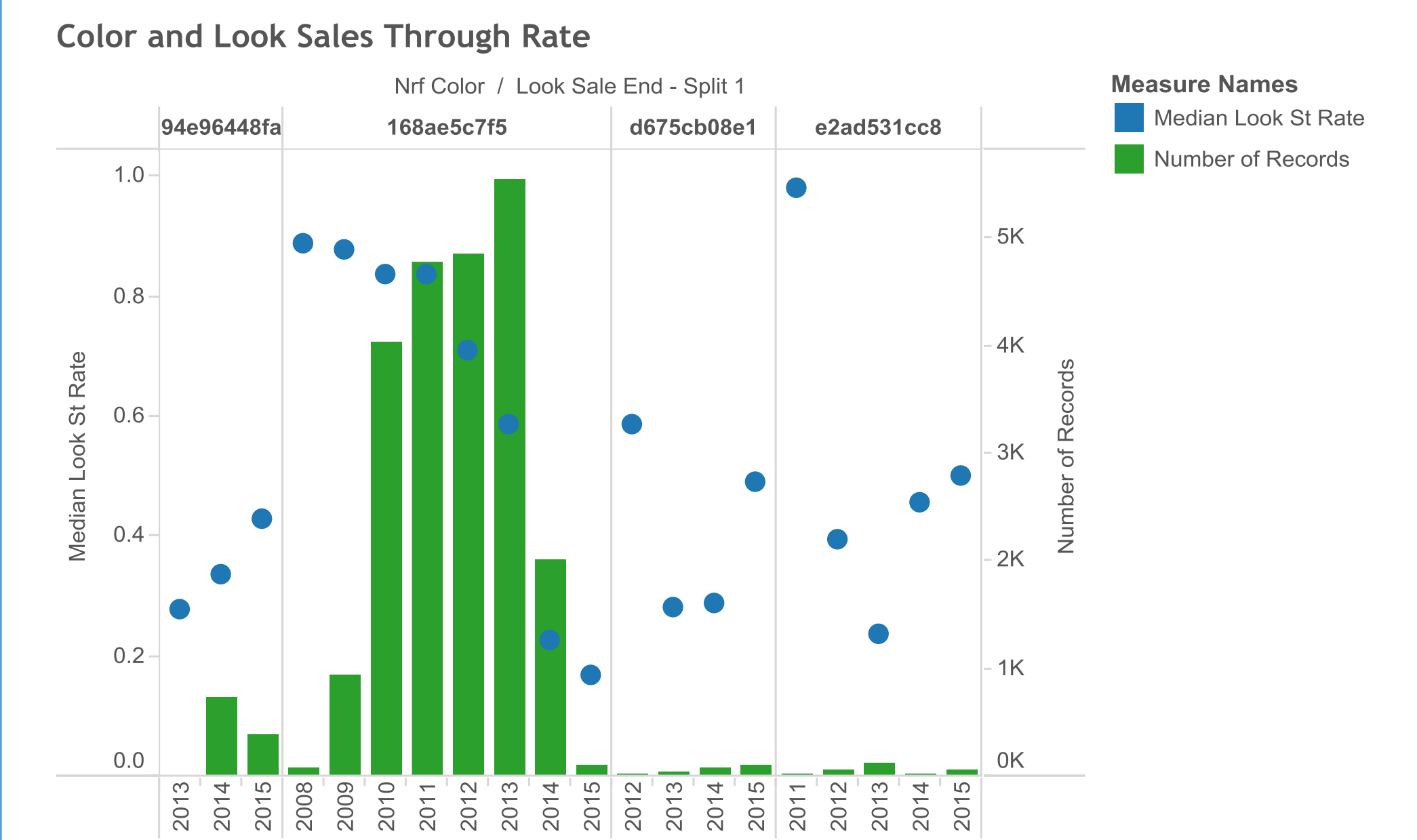


Another factor that contributed significantly to Look Sales Through Rate can be found at Level 4 of the Product Hierarchy. The Product Hierarchy essentially signifies how many clicks it takes to get to a specific item (for example, Level 1 is one click, Level 2 is 2 clicks, etc.). At Level 4, one can see that there seems to be tiers of products, ranging from best sellers to underperformers. Gilt should use this data to sell more products in the top selling tiers of Level 4 in the product hierarchy.



This graph shows the differences in Look Sales Through Rate between products that have a 5th Level and products that only have 4 Levels. Products that only have 4 Levels have "Null" listed as "Level 5 Name". In general, products with only 4 Levels have a higher Look Sales Through Rate than products which have 5 Levels. This is likely because of a combination of 2 factors: products with 5 Levels are more specific, tailored products with smaller mass appeal, leading to lower overall Sales Through Rates, and products with 5 Levels as opposed to 4 will require an additional click. Essentially, a shopper is likely to find a look they want at Level 4 and decide to purchase a look right then and there, without ever clicking and seeing Level 5. Thus, if Gilt wants to improve Look Sales Through Rates, it should focus on less specialized products with broader mass appeal.

## The Color Factor and Notes on Others



Median Look St Rate and Number of Records for each Look Sale End - Split 1 Year broken down by Nrf Color. Color shows details about Median Look St Rate and Number of Records. The view is filtered on Nrf Color, which keeps 168ae5c7f5, 94e96448fa, d675cb08e1 and e2ad531cc8.

Color is another factor that seems to impact Look Sales Through Rate. The complete color data is too much to display in any efficient way, so we decided to focus on 3 select colors that actually trend upwards through the years in terms of Look Sales Through Rate. Almost all of the other colors, including colors that were initially some of Gilt's most popular colors, experience a decline in look Sales Through Rate. However, these three all trend upwards. It is interesting that, in terms of number of records, these three colors are all over the map. Given the trends, Gilt should focus on selling looks with these trending colors to ensure its success in the future. We found a few other factors that also impacted Look Sales Through Rate, but some factors, such as Material and Country of Origin, had so many entries that it would be very difficult to display without cutting out the vast majority of the data.

## Conclusions

Our analysis of the data has revealed a number of factors that influence Gilt's Look Sales Through Rate, including Number of Records, Discount Rate, Days on Sale, Season of the Look, Level in the Product Hierarchy (or number of clicks), and Color. Overall, it seems that Gilt simply got caught up in its early success and decided to expand into fields where it was not really suited to compete. Gilt should consider offering the great discounts which once enticed customers. In our data, Gilt decreased the number of sales in its most recent year while increasing the Look Sales Through Rate, showing a possible self-awareness and desire to get back to its roots. In addition to offering greater discounts and possibly restricting total sales, Gilt can use the information we gleaned from the data to set the duration of sales. Their goal for sale duration should be 36 hours, as this seems to be the sweet spot where the sale is long enough for it to be communicated, but short enough to feel exclusive. Finally, Gilt may use our information to decide which looks to actually sell, focusing on more simplified looks with broad appeal. They would be well-served to use trending colors and follow color trends in the future, and they should look to mostly sell looks in successful seasons.