

# NEW VISION FOR A BUSINESS METHOD

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## Introduction

Recently, with development people turning out for electronic shopping was increased. One of the shopping websites was put under study is **gilt.com**. when we examined this site, we found that it provides instant insider access to today's top designer labels at up to 70% of retail. Everyday there is different items for women, men, kids and home as well. Items for a certain collection are available on sales on the website and it introduces all of the qualitative descriptions for the items like color, brand, code, sales dates, and prices etc. so that the research represents a specific methodology in making analysis for online shopping data and drawing business insights from the provided data. There was two of an outstanding questions needed to be answered, the 1st was: what will all the data tell us? And the 2nd was: what insights can we gain? In order to assess this it was necessary to follow JAVA & Excel programs in analysis.



## Method

A) The curriculum followed before analysis :

- 1- The data from September 2008 through August 2015, and the contents of each column was understood after they got studied well .
- 2- Some of the columns was merged to each other and came up with new columns.
- 3- Rows that may contain any mistakes was removed .
- 4- Finally, rules was extracted .

B) The online shopping data was aggregated and configured by the JAVA program for concluding results .

C) Also used Microsoft office excel for cleaning data that is recorded in a wrong way Ex. when the item's supply price or it's sailing price equals to 0 or negative value or any data that won't lead to a result.

D) Three factors was considered in this process : rate of selling , percent sale , brand or color.

## Results

A) Brand ids : 8, 78,380,430,702,1376,1531,39548

-the following brands ids have the highest amount of sales and sell rate together, which means that these brands are the most sold

-the following brand ids 380,702,1531 has a look\_st\_rate greater than .5 in 86%, 84%, 86% of times when this brand has an item on sale,

-also as long as the discount is greater than 50% on an items of this brand the look\_st\_rate is grater than .5 in 84%, 78%, 73% of the times an item of this brand has been on sale.

brand\_id 1531,1680 with num\_skus 4 have a look\_st\_rate greater than 0.5 in more than 86.9%,80.7% of the times .

B) The color 168ae5c7f5 is the most color with items on sale more than 54% of the items on sale have this color, and its look\_st\_rate is greater than 0.5 in 63.5% of the looks sales, which means that this color is preferred by most of the customers the color eb04d680de: a 15% of the items on sale has this color but its look\_st\_rate is greater than 0.5 in only 38% of the looks on sale which means that this color is offered with high number of times but people dont prefer it, whereas other colors are offered with less amount but has a higher rate than this color.

g) The brand\_id 689,1531 with material code 620f20771b has a look\_st\_rate greater than 0.5 in more than 86%, 85% of the times, respectively, when these brands have the material code 620f20771b.  
The brand\_id 198,430,702 with material code c61f5b9f48 has a look\_st\_rate greater than 0.5 in more than 80%, 85%, 82% of the times, respectively, when these brands have the material code c61f5b9f48.

h) The product\_category\_sort\_key 3d197b2c27 with material code 620f20771b has a look\_st\_rate greater than 0.5 in more than 84.3%,71.4% of the times, respectively, when these brands have the material code 620f20771b.  
product\_category\_sort\_key 5e054d42b3 with material code 5e0aa12df1 has a look\_st\_rate greater than 0.5 in more than 71.5% of the times, respectively, when these brands have the material code 5e054d42b3.

The brand\_id 1790,198,430,899 with price greater than 200 has a look\_st\_rate greater than 0.5 in more than 72.7%, 78.8%,89.7%,71.8%  
The brand\_id 1790,702 with price lower than 200 has a look\_st\_rate greater than 0.5 in more than 72.9%, 84.3%

look_st_rate/season_id	5272(s1)	>0.5	season 1: look_st_rate/season_id/percent = 3653 look_st_rate/season_id/percent = 1259 look_st_rate/season_id/percent = 1619 look_st_rate/season_id/percent = 722	look_st_rate/season_id	1981	<0.5
look_st_rate/season_id	6805(s2)	>0.5	season 2: look_st_rate/season_id/percent = 2555 look_st_rate/season_id/percent = 4250 look_st_rate/season_id/percent = 4307	look_st_rate/season_id	6443	<0.5
look_st_rate/season_id	5294(s3)	>0.5	season 3: look_st_rate/season_id/percent = 1829 look_st_rate/season_id/percent = 1967 look_st_rate/season_id/percent = 3465 look_st_rate/season_id/percent = 3827	look_st_rate/season_id	5794	<0.5
look_st_rate/season_id	2927(s4)	>0.5	season 4: look_st_rate/season_id/percent = 852 look_st_rate/season_id/percent = 696 look_st_rate/season_id/percent = 2075 look_st_rate/season_id/percent = 2907	look_st_rate/season_id	3603	<0.5
look_st_rate/season_id	574 (s5)	>0.5	season 5: look_st_rate/season_id/percent = 175 look_st_rate/season_id/percent = 182 look_st_rate/season_id/percent = 399 look_st_rate/season_id/percent = 867	look_st_rate/season_id	1049	<0.5
look_st_rate/season_id	350 (s6)	>0.5	season 6: look_st_rate/season_id/percent = 38 look_st_rate/season_id/percent = 208 look_st_rate/season_id/percent = 312 look_st_rate/season_id/percent = 622	look_st_rate/season_id	830	<0.5

C) the material 07d3b4aecc: has the most amount of items on sale that are made from it, while its look\_st\_rate is greater than 0.5 in 52.7% of the look sale items .  
the material 620f20771b: has less amount of items on sale that are made from it, while its look\_st\_rate is greater than 0.5 in 80.7% of the look sale items.

F) these are the best combinations of the country\_of\_origin\_id and brand\_id: the brands with ids 78, 380, 430 are the best brands that came from country with id 301 with look\_st\_rate >= 0.5 in more than 88.7%,87.3%,89.8% of the times when these brands from country 301 are on sale.  
the brands with ids 702, 1376 are the best brands that came from country with id 349 with look\_st\_rate >= 0.5 in more than 83.7%,89.2% of the times when these brands from country 349 are on sale.  
the brand with id 1531 is the best brands that came from country with id 334 with look\_st\_rate >= 0.5 in more than 86% of the times when these brands from country 334 are on sale.  
the brand with id 39548 is the best brands that came from country with id 384 with look\_st\_rate >= 0.5 in more than 87% of the times when these brands from country 384 are on sale.

D) the product\_category\_sort\_key 71dcd6f77,830a8d6370,15230fd665,3d197b2c27,fb12c08ae1: has the most amount of items on sale that are product\_category\_sort\_key, while its look\_st\_rate is greater than 0.5 in 53.9%,49.5%,49.4%,52.6%,51.4 of the look sale items .  
the product\_category\_sorts 0d1bcb0d6,29d3e7c69,5e054d42b3: has less amount of items on sale that are product\_category\_sort\_key, while its look\_st\_rate is greater than 0.5 in 76.6%,59.2%,64.8% of the look sale items.

E) ecountry\_of\_origin\_id 349,301; these country\_of\_origin\_ids have the most amount of items on sale , while its look\_st\_rate is greater than 0.5 in 48.0,53.6 of the look sale items .  
country\_of\_origin\_id -1,384: these country\_of\_origin\_ids have less amount of items on sale , while its look\_st\_rate is greater than 0.5 in 64.6,75.7 of the look sale items.

## SUGGESTIONS & CONCLUSION

- 1\* we can see that in s1, s2, s3 the look sale rates is greater than .5 which means these seasons are better for sale that s5,s6 even though all values of rate still high.
- 2\* when joining season+rate+discount these results does not indicate any strong rule except for the first season we can say that as discount increases the rate increases and vice versa this rule is still not strong since the percent of its validity is 60.4 ((3653+722)/(3653+1259+1619+722)) .
- 3\* the suggestion is to increase the amount of looks that are made of this material.
- 4\* the suggestion is to increase the amount of looks that are made of this category.
- 5\* the suggestion is to increase the amount of looks that are came from this origin id.
- 6\* look\_st\_rate for may is the highest among all months so suggestion increase the amount of sale on may.
- 7\* look\_st\_rate for august is the lowest among all months so suggestion to decrease the amount of sale on august.
- 8\* Increase the amount of looks for brand id 78,380,430 that came from country with id 301 .
- 9\* Increase the amount of looks for brand id 1531 that came from country with id 334 .
- 10\* Increase the amount of looks for brand id 702 and 1376 that came from country with id 349.
- 11\* Increase the amount of looks for brand id 39548 that came from country with id 384 .