

Our initial idea was that a car would be more desirable if it was closer to the consumer. However, we also know that location affects price, and a lower price is also more desirable. Thus, we chose to relate discounts to the distances of possible cars from the user in order to list cars by favorability.

We defined discount as percent discount, shown on slide 3. We will also refer to this as the DYGS value (Did You Get Screwed?). The map on slide 3 represents average DYGS value by city, indicating as an example that the northern region of Oregon has cars priced further under MSRP than the southern region.

The consumer would input the importance of a low price and the importance of having the car in close proximity. Each of these would be assigned an integer value of 1-4 to be used in determining our Favorability Factor.

At this point, we need to understand the relationship between the DYGS value and distance as they affect the average consumer's likelihood to buy a car. Logically, we can say that a higher DYGS value corresponds to a higher favorability factor, but it is unclear how the importance of price factors in. Likewise, we can say that a higher distance corresponds to a lower favorability factor, but it is unclear how the importance of distance factors in. One possibility for the favorability factor is shown on slide 4, modeled by the image on slide 4.

It should be noted that the favorability factor is a relative value that is only used in car comparison to make the consumer's experience easier.