The Effect of Starting Prices on the Outcome of Online Sales
Executive Summary:

The objective of the analysis was to determine the most effective starting price for vehicles offered online to achieve the highest sales price and sales ratios. Units with starting prices below 95% of Manheim Market Report Values (MMR) overall were unable to obtain enough bidding activity to drive prices to 100% or more of MMR. On average Commercial units with starting prices between 95-99% of MMR and Dealer units with starting prices of 96-99% of MMR achieve MMR values 100% or more. Additionally units offered with Bid and Buy Now purchase type were successful with Buy Now prices set for Commercial units between 103-105% and Dealer units between 103-107%.

Table 1: Most Effective Start and Buy Now Prices

<table>
<thead>
<tr>
<th>Seller Type</th>
<th>Start Price: Bid Sales</th>
<th>Buy Now Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>95-99% MMR</td>
<td>103-105% MMR</td>
</tr>
<tr>
<td>Dealer</td>
<td>96-99% MMR</td>
<td>103-107% MMR</td>
</tr>
</tbody>
</table>

Overall dealer units had an extremely low 2.5% sales ratio compared to Commercial accounts achieving a 14.3% sales ratio. Dealers appeared to have two dominate strategies. First, with a large number of Dealer units being offered with a starting price of $100 it would appear that the dealers are either uneasy with setting a price or are willing to let the buyers bidding process actually set the price. This strategy was generally unsuccessful resulting in lower sales percentage and lower retention values. The second strategy was the other extreme as 67% of dealer units offered had start prices that were 100% or more of MMR. This would indicate that the dealer is unwilling to accept less than 100% value for their unit and doesn't want to risk the bidding process. It would be recommended that the dealers attempt a strategy of setting start prices at 96-99% of MMR value to optimize retention values and sales percentage.
Objective:
To analyze the effect that starting bids have on online sales, by evaluating the results based on the type of seller: Commercial or Dealer.

Abstract:
Data for the evaluation was limited to vehicles that were listed as “Bid” or “Both.” The listing category of “Both” indicates that the units are offered with both “Buy Now” and “Bid” options for the buyer. Units may also be sold as “Sell Now” indicating that the unit received bid that did not meet the floor price, yet the seller has decided to sell the unit at the bid price. Starting bids are determined by the seller, as are floor prices, which are set to restrict a unit from selling below a set price (and are not visible to the buyer).

Data from a one-year time period was evaluated including over 1.8 million units, comparing start prices to Manheim Market Report Values (MMR) to provide a consistent comparison. The distribution of units in relative categories was determined to evaluate the results.

Definitions:
Mean Bids – the average number of bids received on a unit
Mean Bidders – the average number of bidders for each unit
MMR pct – sales price / Manheim Market Value
Sls pct – sales percent (sales/listing). Listings were not unique to vehicle. Each time a unit is offered it is considered a listing.
% Units Sold – percentage of units that sold in each category of start price as percent of total sold (# sold in category/total sold)
Bid Raised Price – ending sales price/start price; reflecting the amount that bidding increased the price of the vehicle
Commercial Accounts – Starting Price as Percentage of MMR Values

Retention Performance

When evaluating all units that sold with a purchase type of “Bid,” bid activity has a significant effect on raising the price of a unit. Start prices were compared to sales prices for units that sold with bids to determine the percentage-increase that bids effectively raise prices. Overall, units that sold by bid earned 5% above the starting price. Units that had lower starting prices created more bid activity; however, on the whole, when starting prices were 95% of MMR values, the vehicles created enough bid activity to achieve 100% of MMR values. Vehicles with starting prices below 95% MMR were unable, on average, to create enough bid activity to achieve 100% of MMR values.
Sales Percent and Bidding Activity Performance

There was a significant correlation between the start price and the number of bidders, bids and the percentage of units that received bids. Bid activity declined steadily as the start price increased as a percentage of MMR values. Units with start prices at or below 96% of MMR represented 30% of the units offered and 49% of the units sold. These units achieved a sales ratio of 24% and obtained 96% of MMR on average. Units with start prices above 96% represented 70% of the units offered and only 51% of the units sold. These units achieved a sales ratio of only 10%, but obtained an average 105% MMR.

Bidding activity is highest with the lowest starting prices as bargain shoppers are actively seeking a good deal. However, as the sellers know the values of their units they continue to strive for full Market value for their vehicles.
Distribution of Purchase Type

The percentage of units that sell as “Bid” sales decrease as the start price increases as a percent of MMR values. Units with start prices at or below 96% of MMR values only sold 13% of their units as Buy Now, obtaining 96% of MMR values. Units with start prices above 96% of MMR had 29% of their units sell as Buy Now, obtaining 105% MMR values on average. Across all start prices, Buy Now units averaged 103% of MMR values. The higher buy now price reflects a buyer’s willingness to pay premium prices to forgo the bid process and guarantee a purchase. The buyer generally needs this unit for their inventory or has a potential sale pending on the particular unit.
Summary

Overall, Commercial Accounts sold 14.3% of the units listed and achieved 101.5% of MMR with an average sales price of nearly $18,000. When evaluating the start prices compared to MMR values, the units that had start prices at 95% or higher of MMR achieved an average of 100% or more of MMR value. These units represented 76% of the unit’s offered and 62% of the units sold.

Units purchased as “Buy Now” sales represented 29% of the units sold where the start price was above 96% of MMR values, obtaining 105% of MMR. “Buy Now” units represented only 13% of the units sold where start prices were at or below 96% of MMR, achieving only 95% of MMR. Overall, “Buy Now” units represented 21% of the units sold, achieving an average of 103% MMR.

When evaluating all units that sold with a purchase type of bid, bids were effective in increasing the price by an average of 5%. Bids were effective at increasing the sale price by a larger percentage when the start price was less than 100% of MMR.

Based on these results, it is recommended that in order to obtain maximum sales prices and increased bid activity, start prices should be 95% to 99% of MMR values, and Buy Now prices should be set between 103% and 105% of MMR values.
Dealer Accounts – Starting Price as Percentage of MMR Values

Retention Performance

When evaluating all units that sold with a purchase type of “Bid,” bid activity had a significant effect on raising the price of a unit. Start prices were compared to sales prices for units that sold with bids to determine the percentage increase bids effectively raised prices. Overall units with start prices above 80% of MMR that sold by bid sold for 4% above the starting price.

Units with start prices below 80% of MMR had bid activity that was effective in raising the price of the unit over 400% of the starting price. Further analysis shows that 67% of units sold in this category had a starting price of $100, with an average sales price of $14,500, achieving 97% MMR with an average of 14 bids. While gaining more bid activity, the bids were unable to raise prices to 100% of MMR values. This reflects the seller’s inhibition to set an actual price while letting the bidders determine a fair price. This strategy appears ineffective with a 2.4% sales ratio, reflecting the sellers are not achieving a price they are willing to sell at.
Sales Percentage and Bidding Activity Performance

There was a significant correlation between the start price and the number of bidders, bids and the percent of units that received a bid. Bid activity declined steadily as the start price increased as a percent of MMR values. Units with start prices below 95% of MMR represented 27% of the units offered and 40% of the units sold. These units achieved a sales ratio of 4% and obtained 94% of MMR values on average. Units with start prices at or above 95% MMR represented 73% of the units offered and 60% of the units sold. These units achieved a sales ratio of 2% and obtained 107.6% MMR values on average. The overall low sales percentage and lack of bidding activity for units with starting prices over 80% of MMR values indicate a large gap between the sellers’ willingness to take less than market value and the buyers’ willingness to pay market value.
Distribution of Purchase Type

The percentage of units that sell as “Bid” units decreases significantly when the start price is over 80% of MMR values, indicating that many bidders are only bargain shopping. When bid prices begin to approach market values, the bid activity is minimal. More than 70% of purchased dealer units sold with the Buy Now purchase type. “Buy Now” units sold for an average of 103% of MMR values. “Buy Now” units with starting prices of 95% or more of MMR sold for an average of 107% of MMR. This would indicate that buyers are using the online market of dealer consigned vehicles for inventory fulfillment. They are willing to pay market prices or slight premiums if they find specific units that meet their needs.
Summary

Overall, dealer accounts sold 2.5% of the units listed and achieved 103.2% of MMR on units sold with an average sales price of $16,000. When evaluating start prices compared to MMR values, the units with starting prices at 95% or more of MMR achieved nearly 100% MMR values. This accounted for 73% of the units offered and 60% of the dealer units sold.

More than 70% of all sold dealer units sold with the Buy Now purchase type. “Buy Now” units sold for an average of 103% of MMR values. “Buy Now” units with starting prices of 95% or more of MMR sold for an average of 107% of MMR.

When evaluating all units that sold with a purchase type of bid, bids were effective in increasing the price by an average of 4%. While units with start prices below 80% of MMR values had more bid activity, they were unable to obtain full market values. Dealers appear to be purchasing dealer units as “bargains” or as inventory fulfillment.

Based on these results, it is recommended that, to obtain maximum sales prices and increased bid activity, start prices should be 96% to 99% of MMR values and Buy Now prices should be set between 103% and 107% of MMR values.
MMR expectations relative to Condition Grade

Manheim Market Report Values are used as a consistent baseline when determining the value of a vehicle. The condition grade of a vehicle comes into play when determining the percentage of Market value one should expect to obtain for a vehicle. Condition Grades were evaluated for all sold units during a year that received a Post-Grade condition to ensure the repaired grade when evaluating the vehicles. In general the following is a guide to assist in managing expectations for the percentage of MMR your vehicle may be valued at given different condition grade levels.

Table 2: Condition/Average MMR%

<table>
<thead>
<tr>
<th>Condition Grade</th>
<th>Average MMR%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>81.2%</td>
</tr>
<tr>
<td>2.0</td>
<td>89.3%</td>
</tr>
<tr>
<td>3.0</td>
<td>99.1%</td>
</tr>
<tr>
<td>4.0</td>
<td>101.5%</td>
</tr>
<tr>
<td>5.0</td>
<td>103.1%</td>
</tr>
</tbody>
</table>

The insight ECR provides condition grades that are very specific. The percentage of MMR achieved on vehicles steadily increases with the condition grade; on average 100% MMR occurs at approximately a 3.5 condition grade.

The recommendations within this study were made for the average population of vehicles not for a specific grade.