

Explaining Conversion Rate Factors of Auctions

Team #5

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Objective

1. Guide sellers on eBay of how to increase their conversion rate (percentage of transacted auctions)
 - Focus on golfballs
2. Test the robustness of our model on different brands

→ Explanatory with future aspects

Data and Preprocessing

New Callaway/Titleist Golfballs

Callaway HX HOT 1Dz Golfballs 4AAAA+ NO Ink or Logo

Item number: 260238147214

Bidding has ended for this item

~~Runsooth & Titleist stats~~
we cannot use

[Sell an item like this](#) or buy a similar item below.



[View larger picture](#)

Winning bid: **US \$3.75** 

Ended: **May-10-08 12:15:19 PDT**

Shipping costs: **US \$5.95** ([discount available](#))
US Postal Service Priority Mail®
Service to [United States](#)
([more services](#))

Ships to: N. and S. America, Europe, Asia, Australia

Item location: **SO,KY, United States**

History: **5 bids** 

Winning bidder: [shari-lynn](#) ([268](#) ★)

You can also: [Email to a friend](#)

Listing and payment details: [Show](#)

Meet the seller

Seller: [silverman20_08](#) ([102](#) ★)

Feedback: **99.0% Positive**

Member: since Dec-30-07 in United States

- [See detailed feedback](#)
- [Ask seller a question](#)
- [Add to Favorite Sellers](#)
- [View seller's other items](#)

Buy safely

1. Check the seller's reputation

Score: 102 | 99.0% Positive
[See detailed feedback](#)

2. Check how you're protected

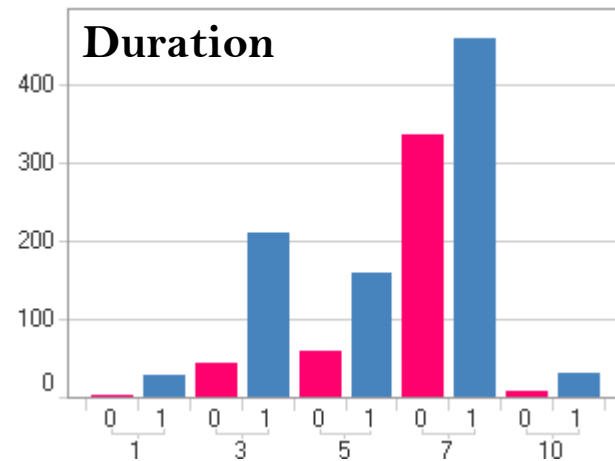
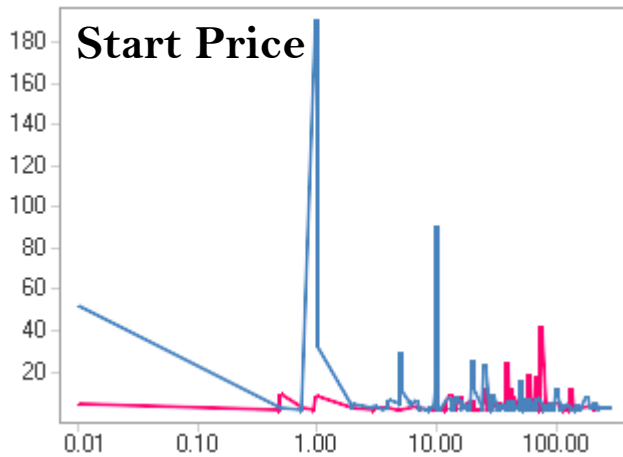
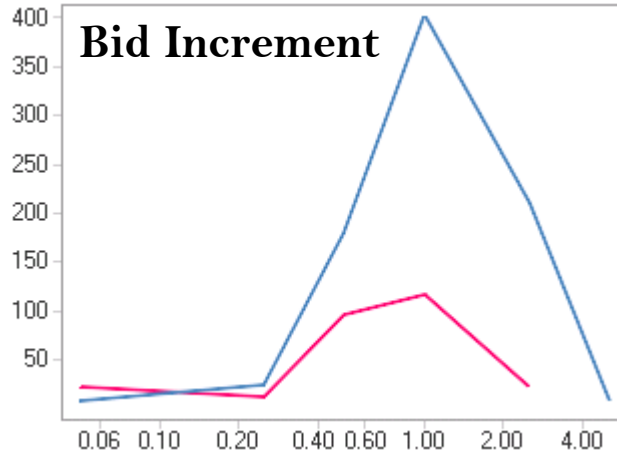
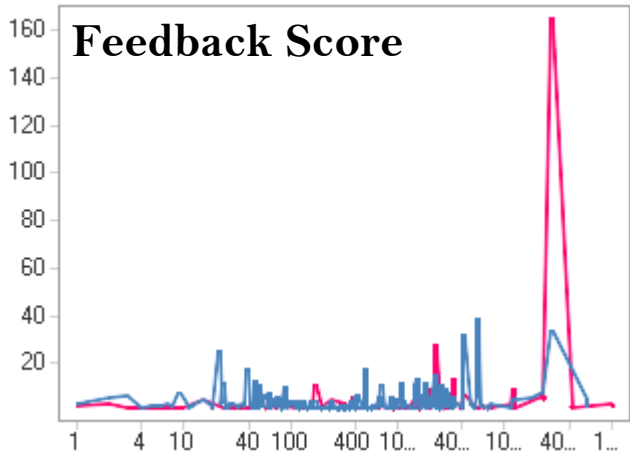
PayPal Up to \$2,000 in buyer protection.
[See eligibility](#)

Returns: Seller accepts returns.
[7 Days Money Back](#)

More:

- *Start Price*
- *Duration*
- *By It Now*
- ...

Exploration

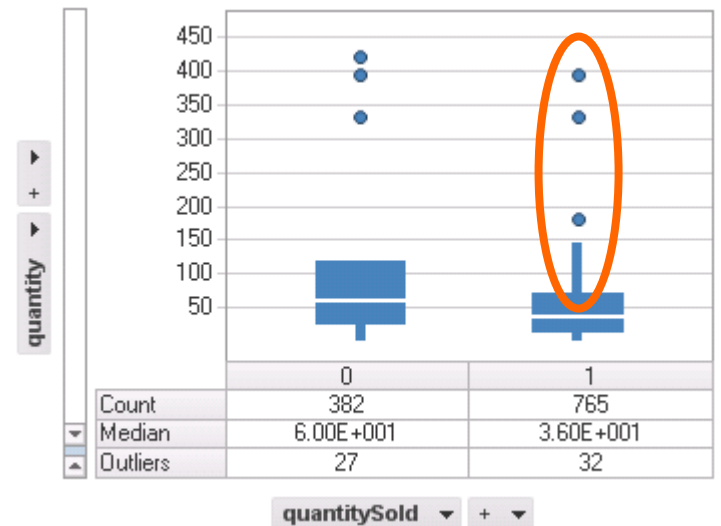
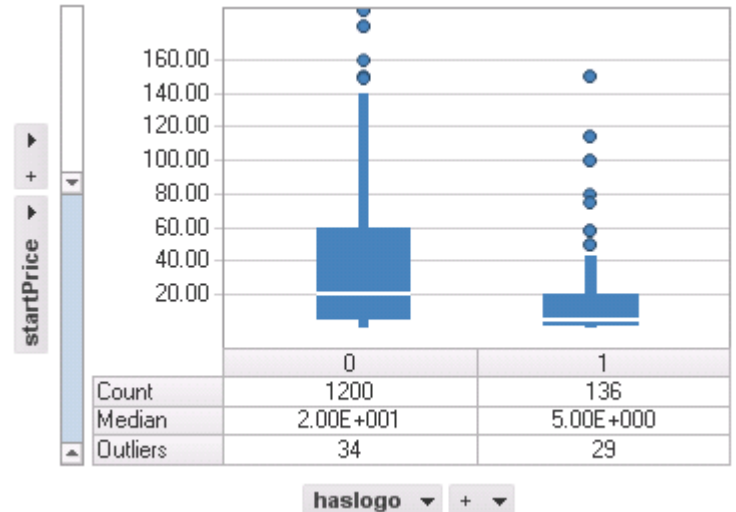
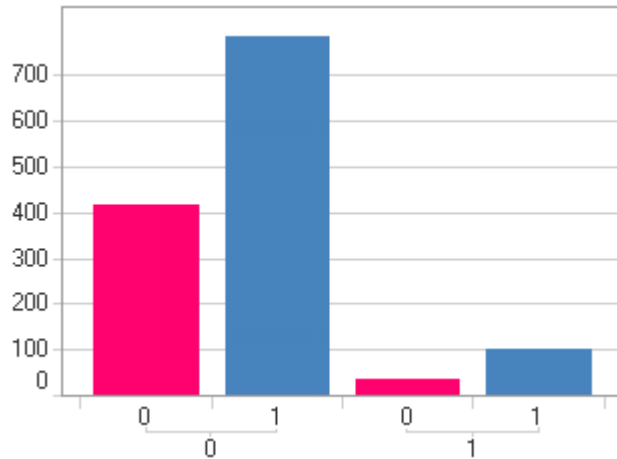


Pink: Auction did not transact

Blue: Auction transacted

Exploration

Has Logo



Pink: Auction did not transact

Blue: Auction transacted

Data Models

	Logistic regression	Classification Tree	Discriminate Analysis
Callaway	Feedback Start Price Bid Increment ByItNow	Feedback Start Price/ball	Feedback Start Price Quantity Duration Bid Increment Logo
Titleist	Feedback Start Price/ball Duration Bid Increment ByItNow	Feedback	Feedback Start Price/ ball Duration Bid Increment Logo

Negative Effect!!

Data Models

	Logistic regression	Classification Tree	Discriminate Analysis
Callaway	Feedback Start Price Bid Increment ByItNow 30.6	 Feedback Start Price/ball 28.3 	Feedback Start Price Quantity Duration Bid Increment Logo 30.9
Titleist	Feedback Start Price/ball Duration Bid Increment ByItNow 21.0	 Feedback 20.3 	Feedback Start Price/ ball Duration Bid Increment Logo 20.9

Conclusions

- Surprising: the lower the feedback score is, the more likely the auction is to transact!
- To increase conversion rate:
 - Increase bid increment
 - Decrease start price
 - Decrease duration
 - Quantity: sell either very big batches or low quantities
- It does not imply that the model is robust to any product!