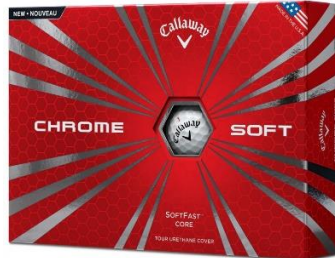


Pricing Callaway Chrome Core Golf Balls



You are the product manager for Callaway's new product division in September 2015. Your first major decision is to finalize the market price for the new Chrome Soft golf balls a premium offering for the US market.

Background¹

Golf ball market generates about \$500 million in revenue a year. However, this market and golf as a whole have faced a sharp decline in 2009 (see figure 1). Your colleagues tell you that the decline was due to the recession and the Tiger Woods scandal. With a more stable economy and the rise of young star golfers there is hope for a growth in the market. The data suggest that 2015 was the first signs of growth in this market in the last 6 years.

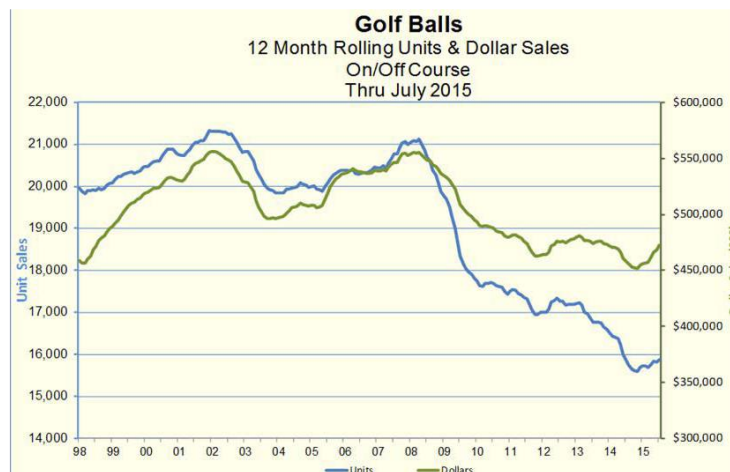


Figure 1: The US golf ball industry sales

In the golf ball market products are segmented by performance (or value). There are 4 main segments in this market (1) Value: these golf balls are sold to driving ranges and are normally marked as practice balls. The price range of offerings of this segment is less than \$19 for 12 balls. (2) Core: these golf balls are used mainly by occasional players, the price range is between \$19 and \$29 for 12 balls. (3) Premium: these high quality golf balls are used mainly by regular players (defined as 20-30 rounds per year), the price range is between \$29 and \$39 for 12 balls. (4) Tour: these are the top quality golf balls, used by professionals, the price range is above \$39. The 2015 growth in golf ball industry, is driven by a sharp increase in the consumers in the Premium segment. Callaway has decided to focus on this segment.

¹ source: Callaway Golf Ball Update to investors in Fall 2015 (goo.gl/bu8AKo)

Premium Golf Ball segment: Titleist is the market leader in the Premium segment and has two leading products in this segment. The Titleist Pro V1 priced at \$39 and the Titleist Velocity priced at \$29. Callaway does not currently have any offerings in this segment and over the last year the R&D team has developed a SoftFast Core technology (shown in figure 2). With this technology, the ball compresses off higher impact clubs (off the tee) for low spin and extra distance. While still having high spin (due to soft outer layer) when used with lower impact clubs (on approach shots). This technology will be sold under the Callaway Chrome Soft brand name and you have to set the market price for this brand. After working through the production costs, your team estimates the variable cost to produce these balls is \$18 for a pack of 12.



Figure 2: The SoftFast Core technology

Designing Conjoint: To identify relevant attributes and their levels a series of focus groups were conducted with premium golfers. The research suggested that the main attributes (and levels) in this premium segment are:

- 1) Brand Name/Model: Titleist V1, Titleist Velocity, Callaway ChromeSoft
- 2) Compression: (60, 80, or 100)
- 3) Spin (Low or High)
- 4) Price (You decide to check three prices to cover the range of the Premium Segment - \$29, \$34, \$39)
- 5) You decide to add SoftFast Core (Yes or No) to assess how much consumers value this technology

Your team rates the current product offerings on these 3 dimensions

Brand	Compression	Spin	SoftCore	Price
Titleist Velocity	60	Low	No	29
Titleist V1	80	High	No	39
Callaway ChromeSoft	100	High	Yes	?

Market research

A conjoint experiment was conducted to help design and test the new technology. You design the conjoint with a fractional factorial design with 18 profiles. (Link to form <https://tinyurl.com/pricing479choice>)

100 representative respondents (all purchase from the premium segment) were recruited from the target market to participate in the conjoint experiment. Respondents were screened based on current ownership, and rounds of golf in the last six months. Respondents were given three profile cards at a time. The task given to the respondent was to pick one of the options. Each respondent repeated the choice 50 times.

The data from the conjoint experiment are in an CSV file called "rawdata_choice.csv". The 18 profiles are described (attributes and levels) in the file "rawdata_profiles.csv". The profiles of the current market options (including 3 for Callaway at the 3 different prices are the file "rawdata_profiles_predict.csv".