https://www.topgolfcallawaybrands.com/news-and-events/presentations

https://einvestingforbeginners.com/rd-spending-as-a-percentage-of-revenue-by-industry/

https://www.acushnetholdingscorp.com/investors/financials/default.aspx

https://www.golfcourseindustry.com/news/global-golf-participation-levels-record/

https://thegolfwire.com/330071-2/

Hey Golfers —

Just a couple of decades ago — the new product life cycle in the golf industry was two to three years.

Today — the new product life cycle is down to a year. And in some cases it is less than a year.

So how much money is spent in the golf industry to develop new products?

Callaway has stated they are committed to $50 million annually in research and development in their 2021 annual report.

Lucky for us — Acushnet and Callaway are public companies and disclose their research and development expenses. Research and development spend has been on the rise in the last decade.

The above chart shows us a nice trend — but it doesn't tell us the whole story. In theory — as revenue increases, research and development expense should also increase.

Let's look at research and development expense as a percentage of revenue.

Acushnet and Callaway had solid revenue growth from 2013 to 2021. Acushnet grew 45% in that time period, and Callaway grew 270% in that time period. Callaway has made significant acquisitions along the way to bolster that revenue number, while Acushnet's growth has mostly been organic.

From 2013 to 2021 Acushnet spent between 2.56% and 3.12% of its revenue on research and development. Over that same time period — Calaway spent between 2.17% and 3.91% of its revenue on research and development.

Here's a more detailed look at Acushnet.

It would be a fair assessment to state that most golf companies spend between 2% and 4% of its revenue on research and development.

I was curious to see how the golf industry stacked up against other industries.

Below are the top five industries where research and development is spent as a percentage of revenue.

- Biotechnology — 30%
- Software — 19%
- Interactive media and services — 19%
- Semiconductors — 17%
- Communications equipment — 17%

Here are couple research and development examples of well known companies.

- Amazon spent $43 billion in research and development in 2020 — about 11% of its total revenue in 2020.
- Apple spent $19 billion in research and development in 2020 — about 7% of its total revenue in 2020.

Moving back to golf.

Callaway breaks its revenue into three segments.

- Topgolf
- Golf equipment
- Apparel, gear and other

Acushnet provides more clarity in its revenue segments.

- Golf balls
- Golf clubs
- Golf gear
- Footjoy golf wear

Research and development may not be a one to one segment revenue expense — but it provides us with a good idea of where Acushnet is spending their money on research and development.

Being that the new product life cycle is closer to a year for companies — do golfers actually buy new equipment ever year?

I conducted a Twitter survey. While a Twitter survey is not the most accurate way to gather data and information — it provided interesting evidence and antedotes.

The most purchased golf equipment appears to be drivers — 12% of golfers in the survey purchase a new driver every other year and 25% of golfers purchase a new driver every three years.

The least purchased golf equipment is putters. With 88% of golfers in the survey purchasing a new putter every four or more years.

According the the R&A global golf participation 2021 study — there are 66 million golfers in the world.

If we take a look at golf drivers being purchased at an annual rate of 2.6% — that would mean that around **1.7 million golfers** purchase a new driver every year. And this number is just the base — it doesn't include the golfer that purchases on a three year cycle.

Callaway is thought to have a 20% to 25% market share of the golf driver market. Depending on the purchase price — Callaway would sell around $200 million in drivers to the golfer that purchases every year. New product launches are essentially recurring revenue. For reference — Callaway did around $1.29 billion in golf equipment revenue in 2021.

Hundreds of millions of dollars are spent on research and development between the large OEM golf companies. And we didn't even get to look at private companies like TaylorMade and Ping.

It looks like the expense is paying off with a positive return on investment.