

Findings

1. **'Icing' the kicker before a field goal actually works.**
2. **America's Team doesn't need to score points to still be beloved by fans.**
3. **There's a silver lining for the 2013 Broncos.**

Recommendations

1. **Keep icing the kicker! Close games could be decided by a timeout.**
2. **Points aren't everything. Branding brings in fans too!**
3. **Don't hate the Broncos. They probably should have won.**

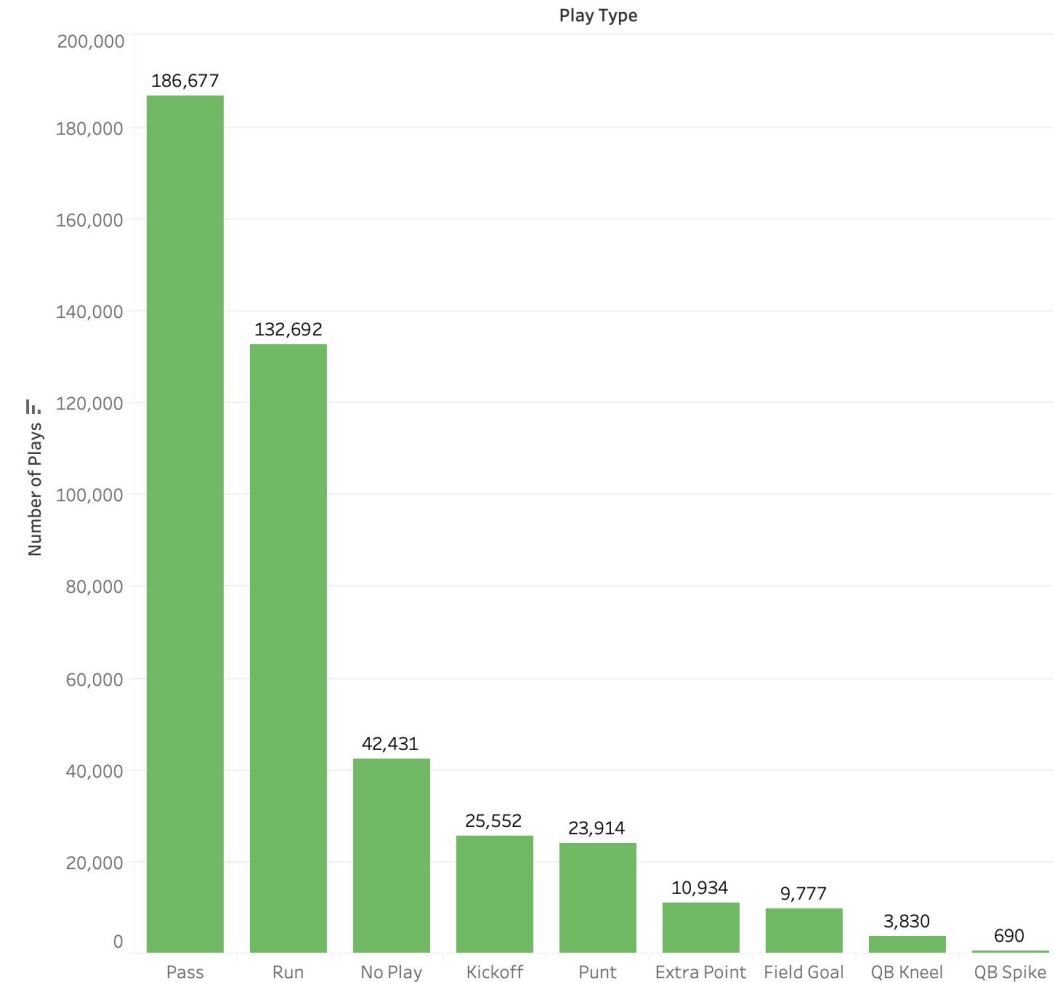
NFL Exploratory Data Analysis

— Jarrek Holmes, Dillan Gajarawala —

Icing the kicker works.

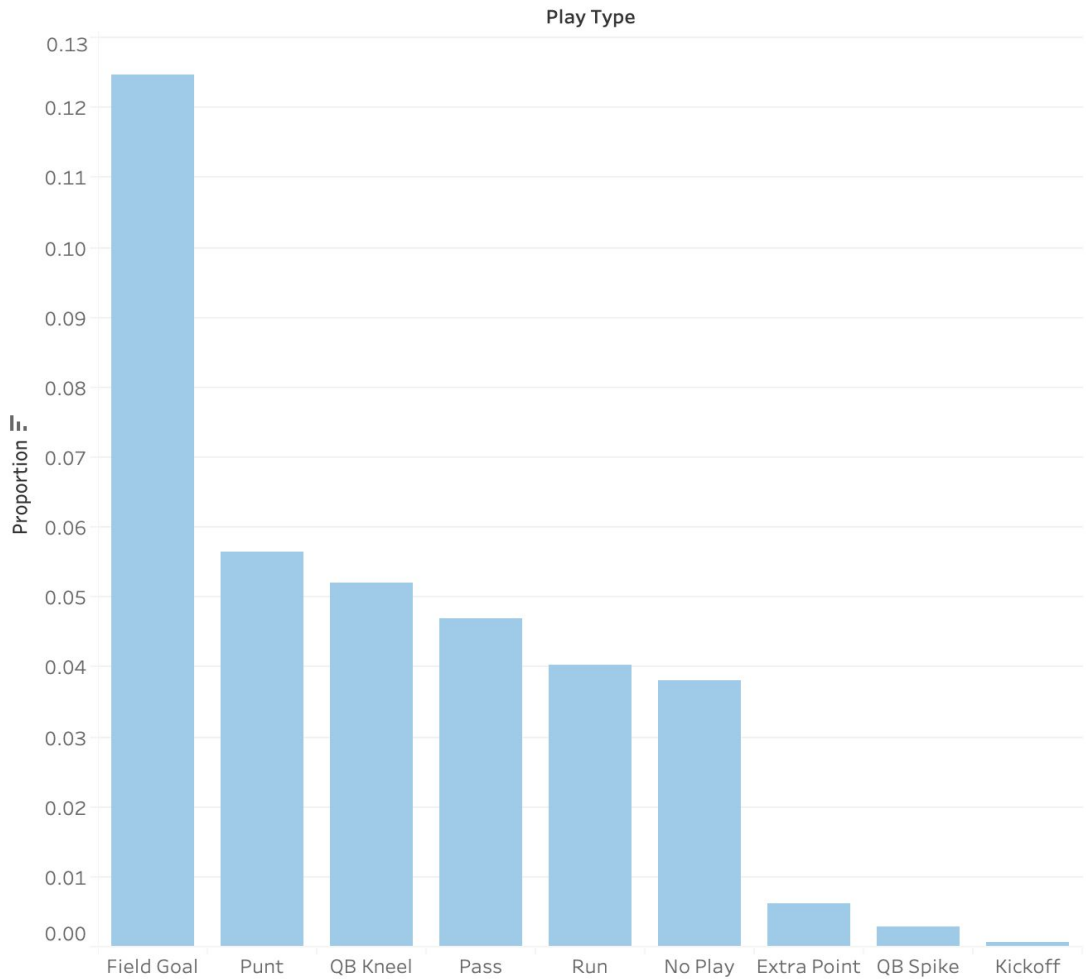


Distribution of Different Play Types



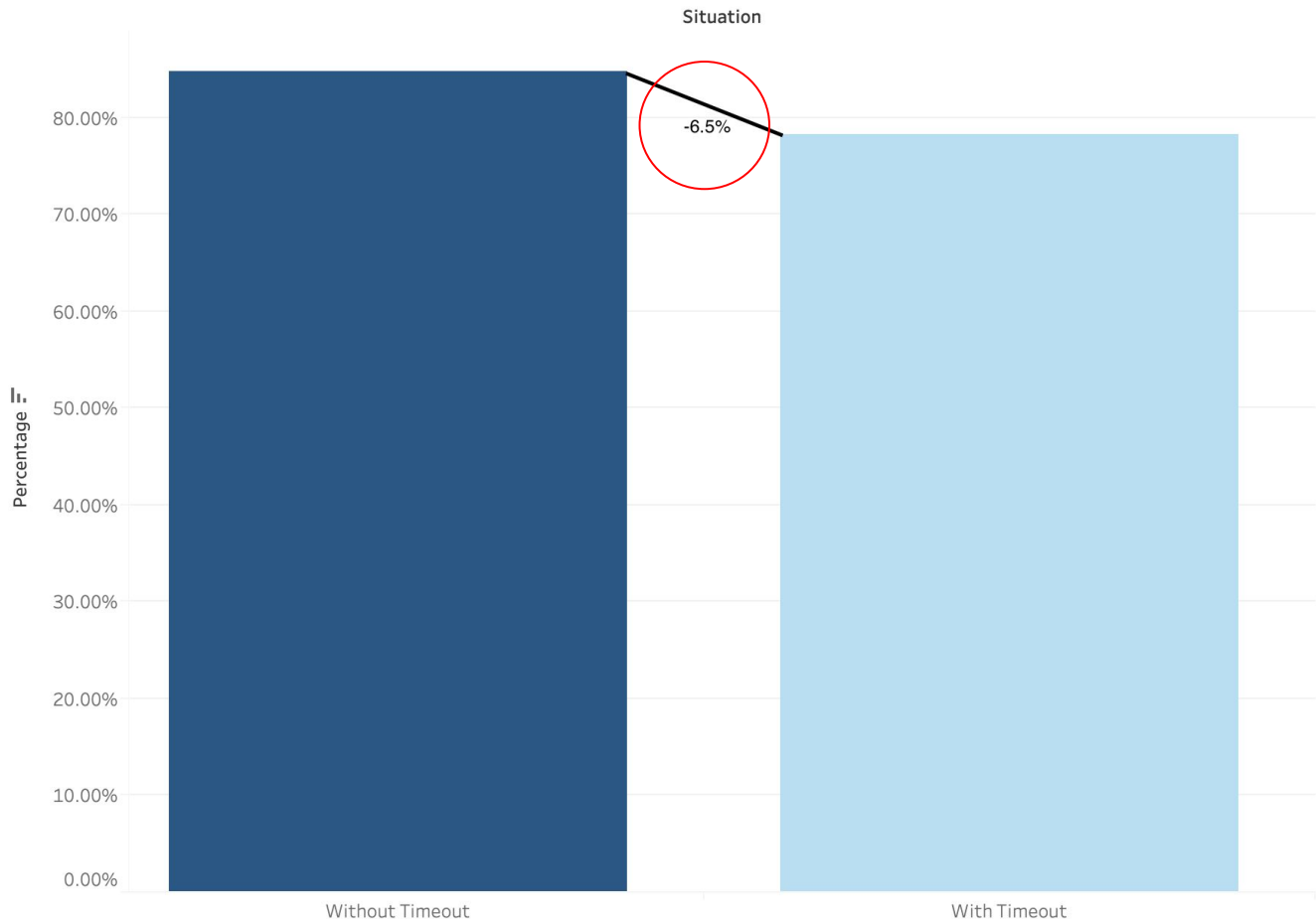
There are far more passing and run plays than any other type of play, and they correspondingly have the most timeouts called before them.

Proportion of Plays with a Timeout Before Them



Although field goals are only a small percentage of total plays, a disproportionate number have timeouts called before them. That's what's called 'icing' the kicker.

Percentage of Field Goals Successful

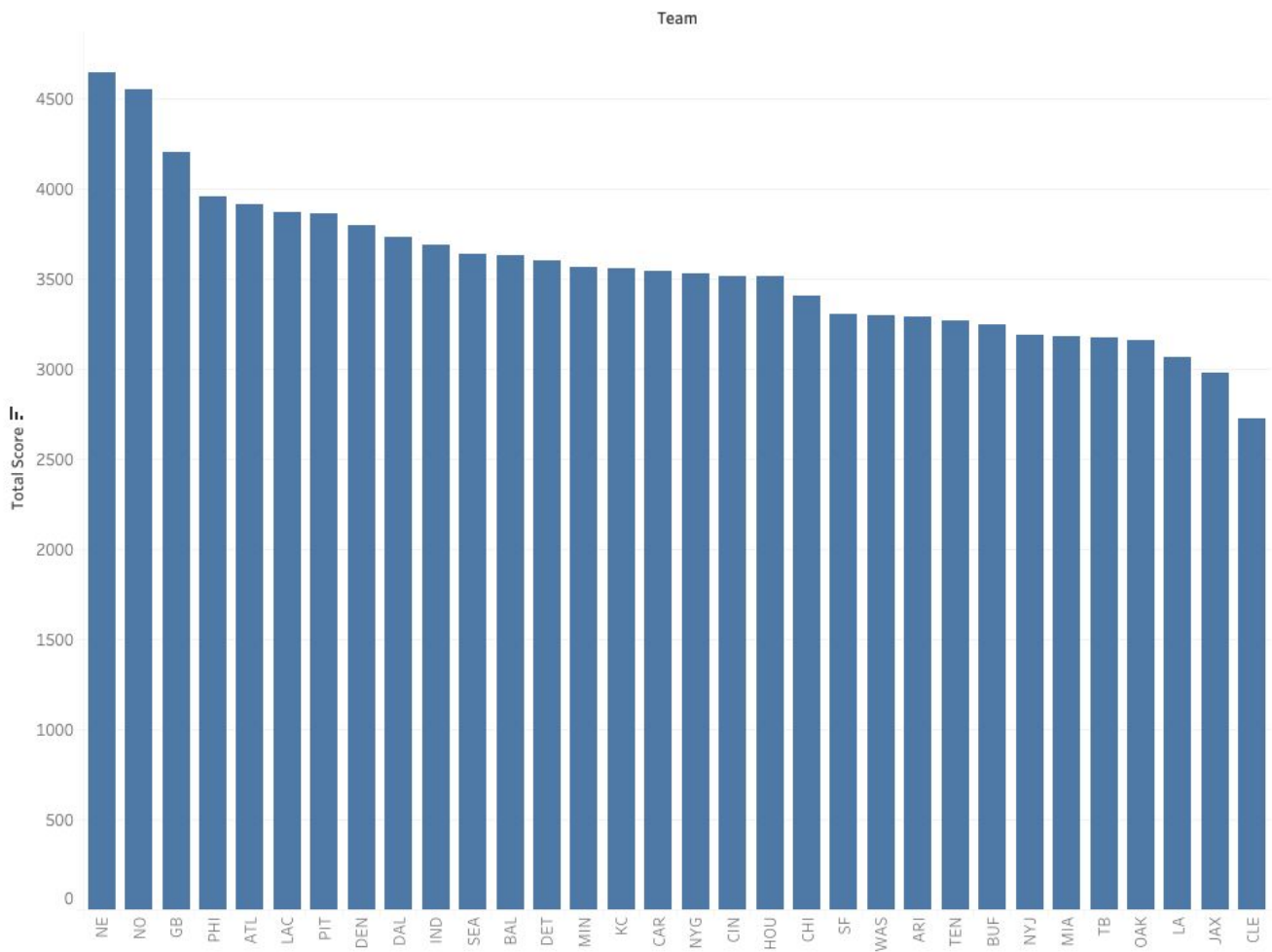


Surprisingly, icing the kicker does work (to some degree). After a timeout is called, about 6.5% less field goal kicks are successful.

America's Team doesn't need to score to be beloved.

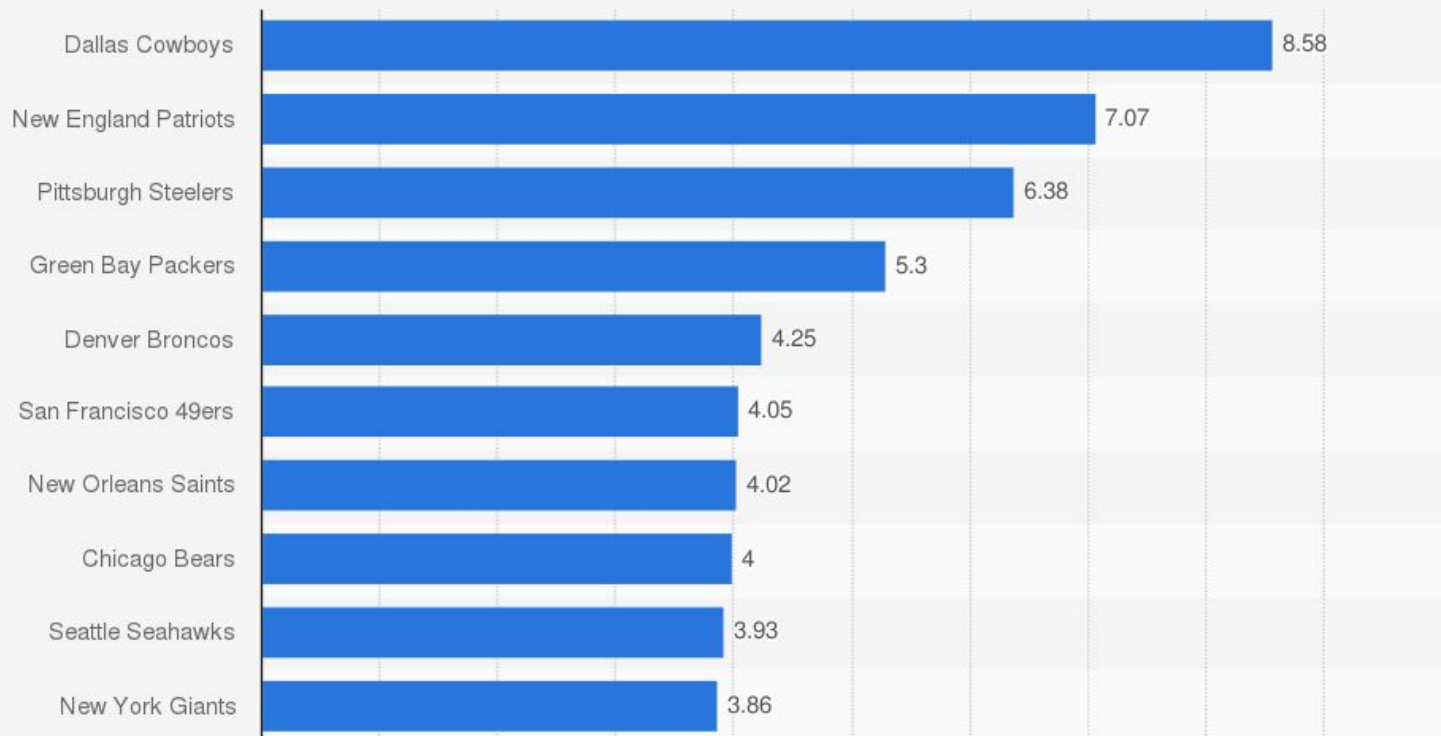


Total Score of All Teams



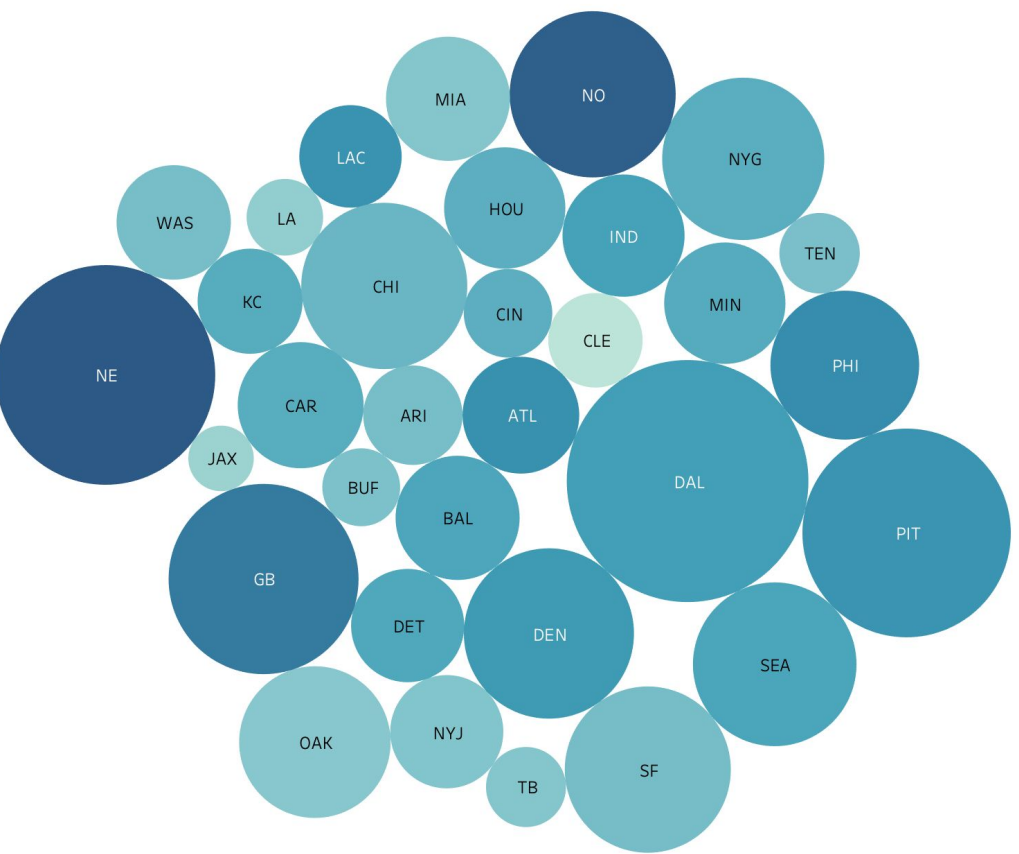
The Patriots and the Saints dominate the league in terms of points. Unfortunately, it's clear to see that despite the Browns' attempt at team-building they still struggle to get on the board.

Facebook fans of National Football League teams as of September 2019 (in millions)



Despite their weaker offense, the Cowboys are the clear winners in terms of fanbase. The Patriots, the top scorer, are a distant second.

Fans and Total Points for All Teams



It's obvious from this graph that the Dallas Cowboys are America's team! It's not always about scoring points, the Cowboys do an excellent job branding their team.

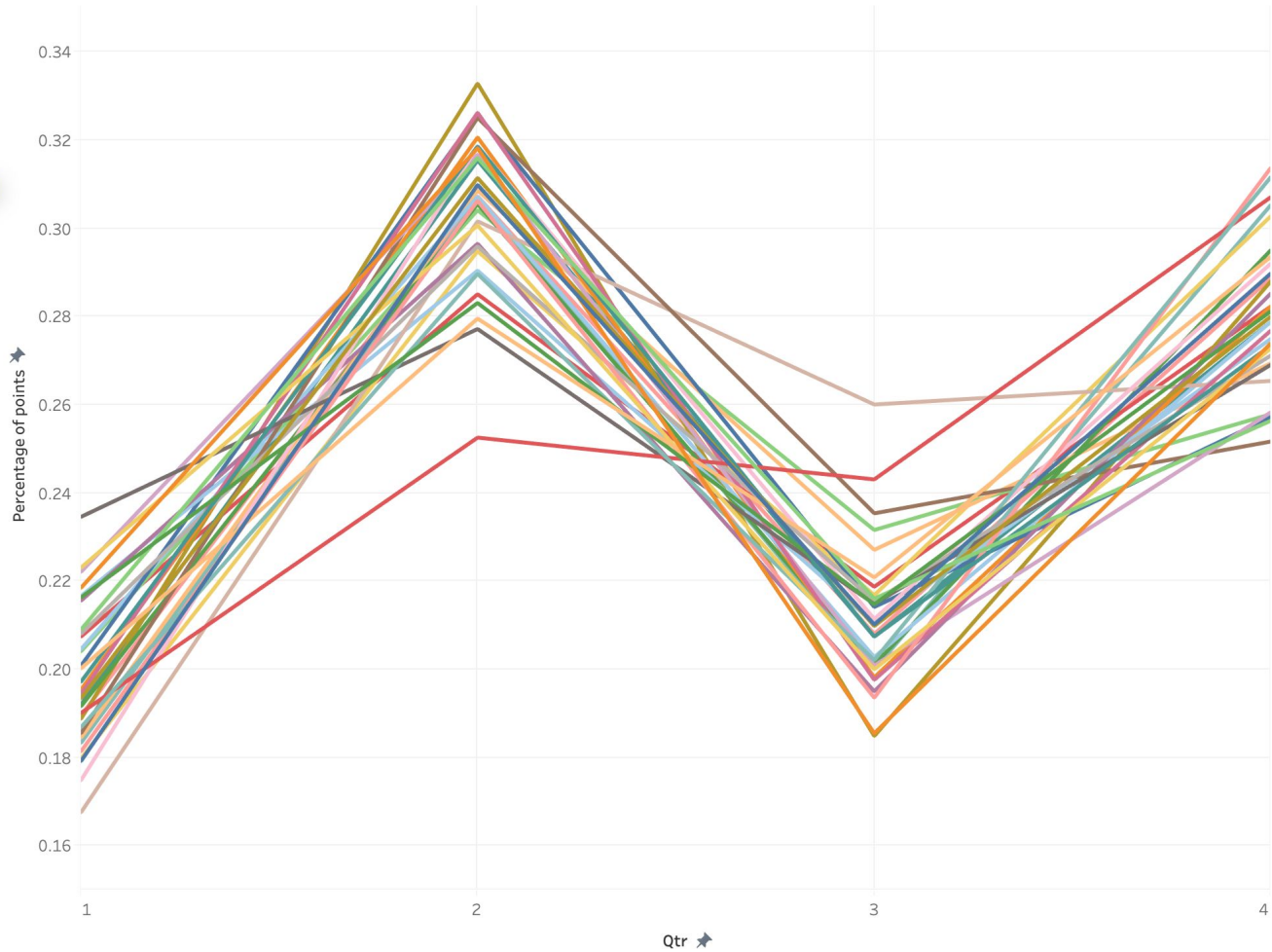
There's a silver lining to the disastrous to the 2013 Super Bowl



43 - 8 Loss

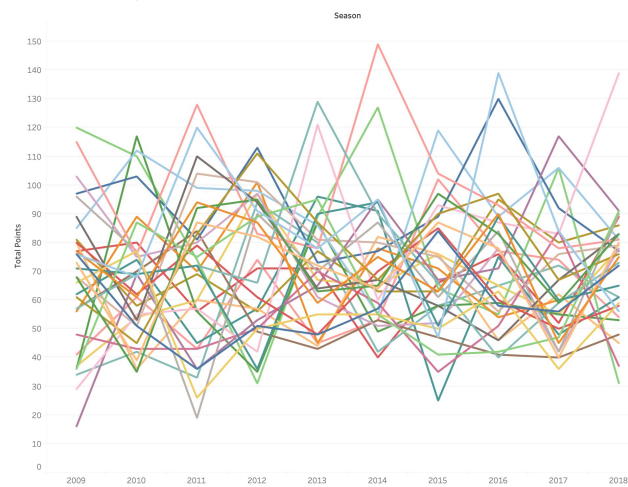
... but is there a silver lining?

Distribution of Points in each Quarter by Team

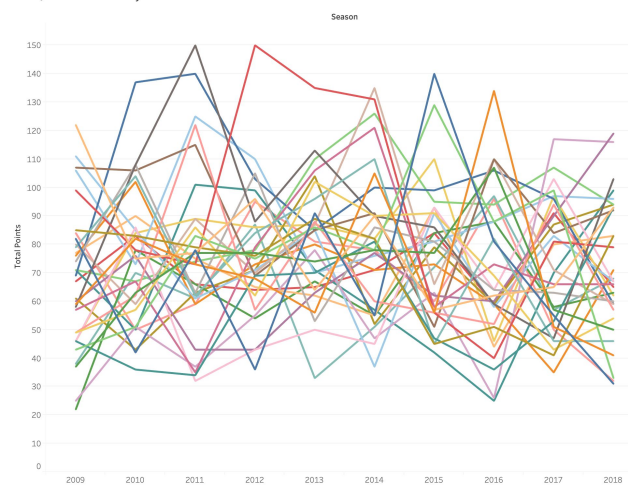


Teams generally score most of their points in the second and fourth quarter, with very little variance. However, if you break it down by season, the story is a little different.

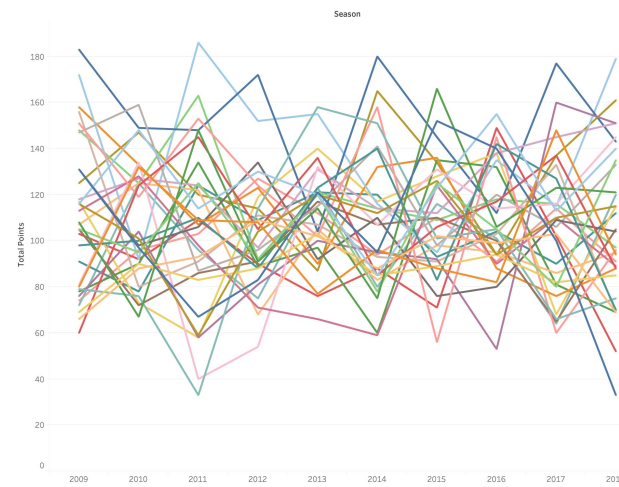
1st Quarter Points by Team and Season



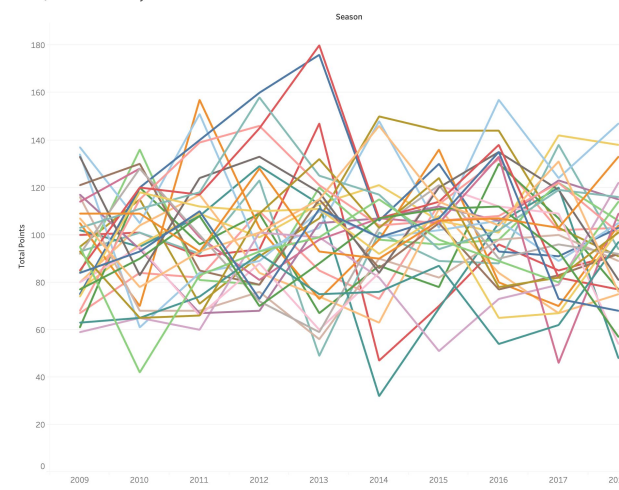
3rd Quarter Points by Team and Season



2nd Quarter Points by Team and Season

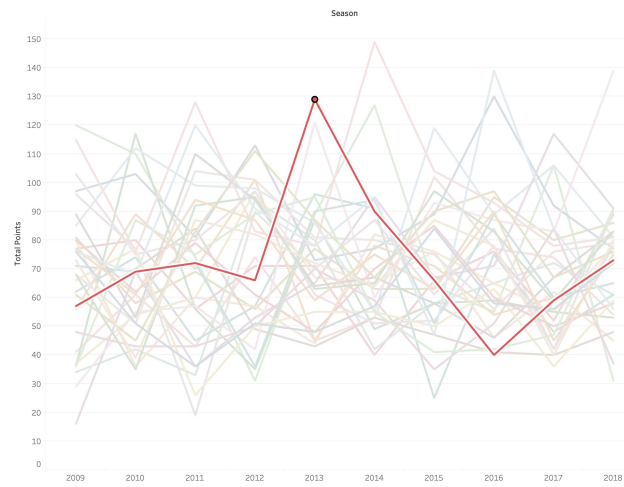


4th Quarter Points by Team and Season

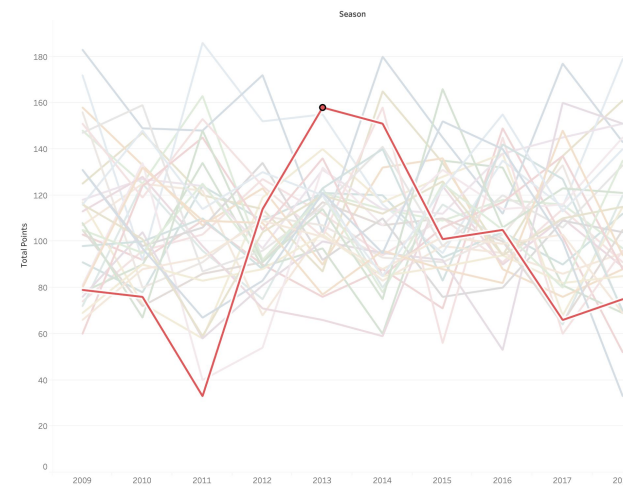


Over the years, some teams score dramatically more points than others. Look at those spikes from 2013. That's the Denver Broncos.

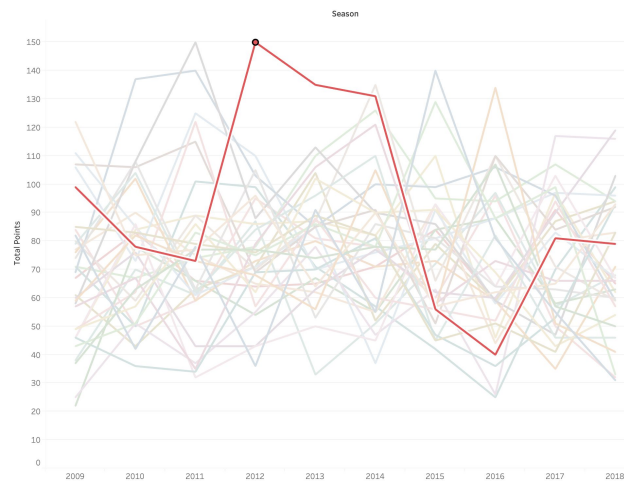
1st Quarter Points by Team and Season



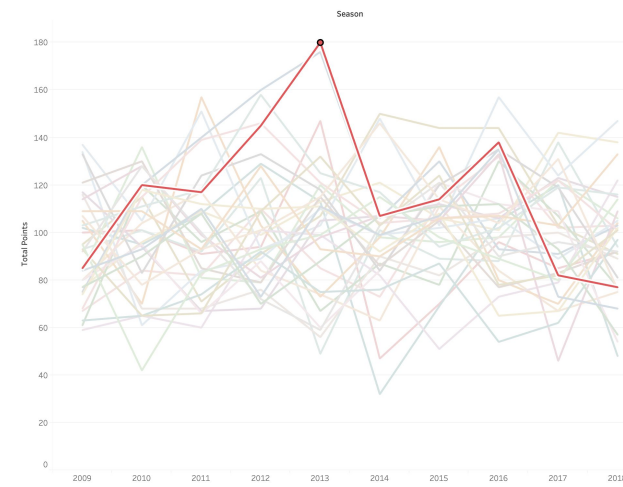
2nd Quarter Points by Team and Season



3rd Quarter Points by Team and Season

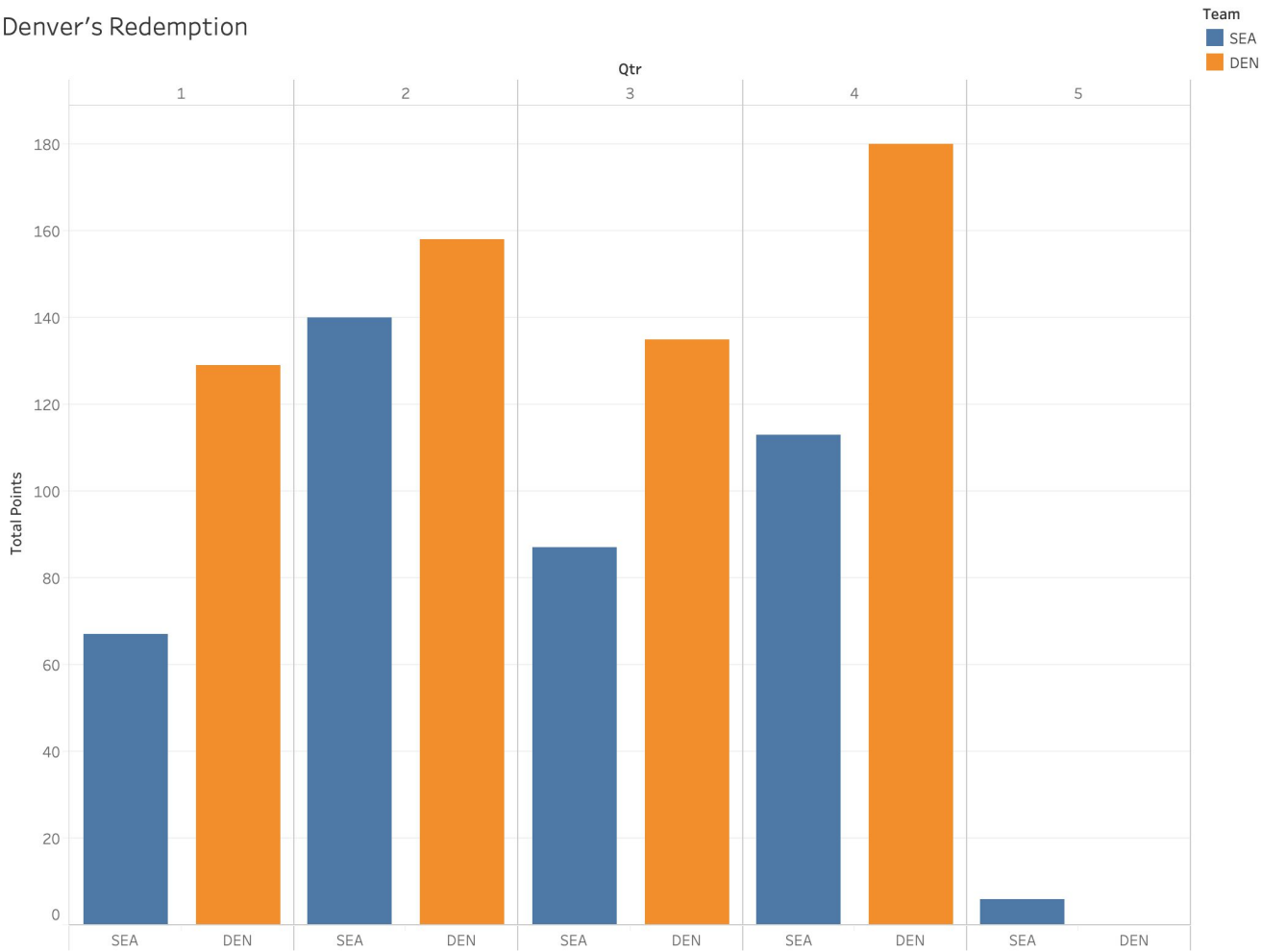


4th Quarter Points by Team and Season



The 2013 season was a record-breaking season for the Broncos. Their offense, led by Peyton Manning, scored a whopping 606 points!

Denver's Redemption



In fact, the Broncos outscored every team that year. They also outscored the Seahawks in every quarter. Although they lost the Super Bowl, they still had an amazing season!

Questions?

— Thank you! —
