This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit https://www.djreprints.com.

https://www.wsi.com/articles/2010s-decade-when-numbers-broke-sports-11576710216

SPORTS

The Decade When Numbers Broke Sports

In the 2010s, data and analytics changed the way games are played—for better and worse.



Brad Pitt (left) played Billy Beane in 'Moneyball,' which was released in 2011, at the beginning of a decade that would change sports forever. **PHOTO**: COLUMBIA PICTURES/EVERETT COLLECTION

By Ben Cohen, Jared Diamond and Andrew Beaton

Dec. 19, 2019 7:31 am ET

It wasn't long ago that baseball players still bunted, football coaches were unapologetically conservative and basketball teams doubted Stephen Curry. It was only the beginning of this decade.

But what happened over the last 10 years inside MLB ballparks, NFL stadiums and NBA arenas rendered the sports almost unrecognizable. The games barely resemble the previous iterations of themselves. They have been reinvented in front of our eyes.

The 2000s were a time for the most popular American sports leagues to recognize the power of data. The 2010s were about implementing those analytics and letting numbers dictate strategy.

"I don't know if the debate needs to be if it's better or not," said Billy Beane, the Oakland Athletics' executive vice president of baseball operations. "It's just evolution."

If this decade brought the hacking of sports, then the next decade could bring a reckoning. As today's athletes and executives continue to search for value in numbers, they risk making their

games homogenous, interminable and repellent to fans.

But there have been so many fundamental changes to the way baseball, football and basketball games are played that there is no longer any doubt that the nerds have won—and sports will never be the same.

Beane happens to be the person most responsible for this shift in human behavior. His radical approach to building the A's into a perennial contender last decade was the inspiration behind "Moneyball," and now a generation of front-office employees have entered the industry having been raised in the data-driven world that "Moneyball" wrought. There's no turning back now.

"The fact that this happened is not a surprise at all," Beane said. "Initially, it took longer than I would have expected. But once it gained momentum, it went faster than I would have expected."



Stephen Curry went from a recently drafted rookie to the most influential player in the game between 2010 and 2020. **PHOTO**: EZRA SHAW/GETTY IMAGES

For all the drama in the NBA off the court, for example, the league really changed on the court over the last decade.

A profusion of data, wave of analytical executives and generation of outrageously talented players brought the NBA to a mathematical breakthrough many years in the making: 3-pointers are worth 50% more than 2-pointers.

Basketball had been played more or less the same way for more than a century. Then the NBA decided that way didn't make a whole lot of sense.

The realization that creating layups, free throws and threes was optimal strategy radically changed the sport. The average number of 3-point attempts per game increased every year of the last decade. At the start of the decade, NBA teams shot 18 threes per game. Now they're

averaging 34 threes per game. The Houston Rockets were the first to shoot 40 per game, and they're currently inching closer to 50. At the beginning of the decade, there had never been a team that shot 50 threes in *any* game, let alone *every* game.

Shots from 15 feet are out. Shots from 25 feet are in. The 3-point line has become the most important strip of paint in sports.

"If you move it back 18 inches, that will impact strategy of our teams," NBA commissioner Adam Silver said.



Kansas City Chiefs quarterback Patrick Mahomes represents the future of the NFL. PHOTO: PETER AIKEN/GETTY IMAGES

similar data binge, from the way teams analyze players to the plays they call, even if gruff coaches still want to deny it. The best way to understand this transformation is to study the record books: Every passing record is owned by someone who's still playing.

Aaron Rodgers has the best all-time passer rating. Drew Brees has thrown the most touchdowns. He's also thrown for the most yards. And it doesn't take a calculus degree to understand why quants have screamed for teams to pass the ball more. It was simple. As it turns out, passing consistently yields more yards.

But the strange thing was how long it took and how many kicks in the rear end it took NFL teams to realize this. As football changed its rules over the last decade to protect quarterbacks and wide receivers, and when innovative offenses from high school and college infiltrated the NFL, passing became more lucrative than it had ever been. There have been so many changes to the NFL's product that the league in 2010 and 2020 have about as much in common as football and foosball.

It's not just that teams are passing the ball more. It's how they're doing it. NFL teams now take 64.1% of their offensive snaps out of the shotgun. They took 62.6% of snaps from under center a

T he N F L w e nt th ro u

h a decade ago. The ratio has flipped.

But there is a fundamental tension in the relationship between teams and their league that could forebode trouble going forward. A league is responsible for the overall health of the sport. A team is responsible for winning games.

"The most entertaining thing you can do is win games, and if you're an executive you should do everything you can to make the smart and most efficient decisions you can make," Beane said. "If that results in a less entertaining game to one or two people, there will be three people who like it more. Losing games isn't entertaining for anybody."

Their objectives don't always align, and the leagues soon might have to answer the sorts of existential questions that sound absurd to teams, such as how many 3-pointers is too many.

Silver put it this way: "I think people are willing to step back, look at it from a fan-first perspective and say: 'What set of rules will create the best competition and the most aesthetically pleasing game?'"



Mike Trout established himself as the best (and richest) player in baseball over the last decade. PHOTO: MARCIO JOSE SANCHEZ/ASSOCIATED PRESS

That's also the issue facing baseball as it attempts to balance statistical and technological innovation with the need to put an entertaining product on television every day for more than half the year.

The two sides have been engaged in a brawl for the future of the game. But now it seems clear which side is in the lead—and MLB commissioner Rob Manfred is contemplating dramatic changes to rein in the turbocharged rate of change.

Home runs and strikeouts have reached record highs because teams realized that sacrificing contact for power ultimately leads to more runs. Bunts and stolen bases all but disappeared

once they were cast aside as foolish risks. Starting pitchers work fewer innings and have been replaced by an endless parade of relievers pushing the limits of how fast a human being can throw a ball. Players even stand in different places than they had for a century. Games are longer and slower than they have ever been.

But the biggest impact that numbers have had on baseball over the past 10 years has nothing to do with anything on the field. The data revolution has created a world where front offices, helmed by baseball outsiders, run their organizations less like sports teams and more like Fortune 500 companies, largely revolving around the ruthless pursuit of inefficiencies.

The result is new phenomena like "tanking," with a whole bunch of teams punting on the present for (perhaps) a brighter future, even if fans decide they'd rather choke on peanuts and Cracker Jacks than watch putrid baseball. Four teams last season finished with more than 100 losses, matching a record, and MLB attendance dropped for the fourth consecutive season.

It's a reminder that sports became undeniably smarter over the last decade. It might take another decade to determine whether they're ultimately as entertaining.

SHARE YOUR THOUGHTS

Has data and analytics changed the way games are played for better or worse? Join the discussion.

Write to Ben Cohen at ben.cohen@wsj.com, Jared Diamond at jared.diamond@wsj.com and Andrew Beaton at andrew.beaton@wsj.com

Copyright © 2019 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit https://www.djreprints.com.