

**WORLD CUP  
2018**

# How data has transformed the World Cup

Are statistics killing the magic of football? The upcoming World Cup will be the most analysed ever, as football has finally started to take data seriously. How much does it matter?

There are 64 matches played at a World Cup — a total of 5,760 minutes. A total of 736 players will go to Russia from 32 teams. **Around 160 goals** are likely to be scored. There will be **roughly 220 yellow cards** and about ten red cards.

These are the statistics that are easily available, readily understandable and of obvious importance to fans.

But football data goes way beyond this. At every match of this World Cup, hundreds of people will be sitting in offices poring over the most minuscule details.

Every attempted pass will be recorded. Every tackle won, every foul, the location of every touch of the ball — all this will be fed into vast databases to be used by anyone.

Four years ago, the winners of the last World Cup used this to great effect. Ahead of their match with Brazil, Germany was able to analyse absolutely everything about their opponents and identify their weaknesses. It ended in a **7-1 win** — perhaps the most extraordinary result in World Cup history.



**Big guns:** All these odds were carefully selected by looking at mountains of statistics.

All of this is surprisingly recent, and it rankles with many fans.

Part of football's appeal is its simplicity. A cricket scorecard is a baffling kaleidoscope of different numbers. Football scores contain just two: 1-0, 4-1. It is commonly said that "the only statistic that matters is the final score".

So why the sudden drive to complicate things?

The main aim is to get an accurate judgment of just how good a team actually is. As football is a low-scoring game, the match result can often be misleading on this front.

One way to rectify this is to examine "expected goals". This evaluates every shot taken in a match and makes a judgment on how likely it was to be a goal. It ends up with a total of how many goals "should" have been scored.

The idea is that good and bad luck **evens itself out**, and that judging performances over a long period of time is the best way to judge how good a team is.

But at short competitions like the World

Cup, this may not happen. You can **fluke your way through**, and that is part of the appeal. Do statistics really help us understand the game?

### Numbers game

Of course they do, say some. Nobody claims that they count for everything, but more information is never a bad thing. Statistics help us overcome prejudices and short-term thinking to make evidence-based judgments. Statistics enrich our enjoyment of sport by helping us see deeper trends. They improve it hugely.

As well as being frequently meaningless, statistics take away the romance of football, reply others. Numerical thinking reduces football's golden moments down to clinical mathematics and probability. Football is a fluid, simple game, not yet another excuse for pseudo-intellectual pretentiousness.

## Q & A

### Q: What do we know?

A: This World Cup will be the most analysed yet, as the mixture of sport and data becomes more and more lucrative. Many of the people who use the data do so in order to win money

betting on football. But in recent years, interest in sporting statistics has increased hugely and is no longer the preserve of a few eccentric maths enthusiasts.

### Q: What do we not know?

A: To what extent this trend will continue. At some point, the amount of information that it is

possible to obtain is likely to plateau. We also do not know how much statistical modelling will improve in order to cut out the occasions where it misses certain features of a team or a player.

## YOU DECIDE

1. Do statistics help our understanding of sport?
2. Can you win the World Cup by being lucky?

## ACTIVITIES

1. What is your favourite sport? It could be football, tennis, basketball, or something completely different. Split a page into two columns and write down what elements of your chosen sport are influenced by luck, and what parts are determined by skill.
2. Draw a graph illustrating a statistical trend in a sport of your choice.

## SOME PEOPLE SAY...

*"There are lies, damned lies and statistics."*  
Mark Twain

### WHAT DO YOU THINK?

## WORD WATCH

**Around 160 goals** – There are roughly 2.5 goals on average in a football match, though this varies. At the 2014 World Cup it was 2.8, at the 2010 World Cup it was 2.3, and in last year's Premier League it was 2.7.

**Roughly 220 yellow cards** – There are about

3.5 yellow cards on average per game, but again this varies greatly between different countries, where standards of refereeing differ.

**7-1 win** – Germany's 7-1 win over Brazil was the highest margin of victory ever in a World Cup semi-final. Germany were 5-0 up after just half an hour. Before the game, bookmakers could not split the sides.

**Evens itself out** –

Even over long tournaments, such as leagues, teams can get lucky. According to the expected goals value of each team, Leicester City should have finished seventh the year they won the league.

**Fluke your way through** – For example, Portugal won the 2016 European Championships despite winning only one game in normal time.

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