

# ROBOBLOGGER





A UNIQUE COLLABORATION BETWEEN  
**THE TELEGRAPH AND GOOGLE**

## A real-time sports action visualiser

“The newsroom has access to a huge amount of quality data, but it can be incredibly time consuming for journalists to turn that into graphics for live reporting. Roboblogger frees the writers up to produce more of the award-winning reporting and analysis they are known for, but means our readers are still able to enjoy the additional insight provided by the visualisations.”

Malcolm Coles, Director of Digital Media at Telegraph Media Group

10th June, 2016

**ROBOBLOGGER BECOMES SELF-AWARE**

Euro 2016

**51 MATCHES, 163 GRAPHICS**

ped to the back post where Gudjohnsen  
eled off, but Ingsdon didn't see him and  
diverting it away.

hot into Halldorsson's hands from 10  
break with Savarsson darting into the  
Lorfs in no man's land. He crosses for  
Mangala tracks the ball and knocks it

and (Hjarnason) And still they keep  
the ball up the left and Skulason fires in  
crisp cross. Hjarnason leaps to meet it  
and past Lloris. True grit.



hand or paying tribute to Michael  
ing one glove? Sigthorsson goes off to be  
er Gudjohnsen.

on: Payet off for Kingsley Coman.

those dedication and organisation have  
mendable, push Payet out on to his left  
diligence and no trace of chucking the  
ance break. It has been a very effective  
has scored one with his left tonight.

from Umтитi at the edge of the box.  
jured and he is third choice, France's  
ly to produce centre-backs of quality,  
standing, is remarkable.

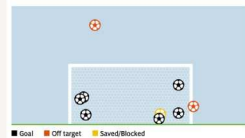
ing the point that viewing matches  
and filter is a reductive, masochistic vice  
ne's enjoyment... but do you reckon  
e bending their backs as much as  
down? Different expectations, of  
probably why there are such  
emes.

on, Enter Eliaguim Mangala, exit  
y, free to play in the next match.

numbers, four v three, with Siasoko  
ddle and leaving Ragnar Sigurdsson in  
three in the box cope well, Savarsson  
after he receives Siasoko's pass and in

10:52pm  
Germany penalties

Germany penalties



10:52pm  
Agonisingly close for Buffon



Mate. MS. Mait. Buffon is so so so so so close to  
stopping that penalty. The ball squirms underneath his  
body, between his hip and his hand.

That was the worst penalty shoot-out I've seen in ages. In  
terms of quality, I mean. The tension was magic.

10:49pm

Germany 6 - 5 Italy

Hector steps up... AND SCORES! Bottom right, back of  
the net, GERMANY ARE THROUGH!

10:49pm

Germany\* 5 - 5 Italy

DAEMIAN MISSES! His penalty is low and weak like  
Gareth Southgate's and Neuer saves! Hector is next and  
can win it for Germany!

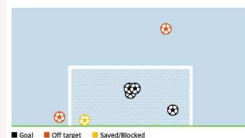
10:48pm

Germany 5 - 5 Italy\*

BOATENG SCORES!

Italy are putting all their penalties down the middle.

Italy penalties



10:47pm

Germany\* 4 - 5 Italy

De Sciglio HITS THE BAR! But the ball comes off it and  
into the back of the net. Boateng is next. His head went  
earlier. Can he hold his nerve?!

10:46pm

Germany 4 - 4 Italy\*

What a penalty. Kimmich steps up and tucks his penalty  
into the bottom left corner. That was brilliant. De Sciglio  
up next.

10:46pm

Germany 3 - 4 Italy

Parolo scores.

10:46pm

9:16pm

59 min

Poland are playing softly, softly catchee monkey to draw  
Portugal out, hence the possession switch on the graph.

Possession over last 10 minutes

Poland

71%

Portugal

29%

9:15pm

57 min

Ronaldo free on the left, bounds down the left  
horizontal whitewash of the box as of old then spoons a  
left-foot shot into the side netting

9:14pm

54 min

Paszcan strings the ball across the back four over to  
Piszczek who eventually, calmly, plays it up to  
Krychowiak in the centre-circle who tries to spring the  
offside trap but mistimes it.

9:10pm

51 min

Renato Sanches twists Jedrzejczyk's plasma as he turns  
him twice down the Portugal right then rolls back a pass  
to Cedric who stands up a cross from the edge of the box  
to meet Ronaldo's near-post run but it goes over his head.  
Seconds later he has a second bite from Adrien Silva's  
cross but gets too close to Fabianski and barges into him.

Patrick O'Brien

@browns1711

Can imagine Anderson sat at home with a barrel of fried  
chicken watching Renato Sanches thinking, "I used to  
able to do that..." #POLPOR

9:09 PM · 30 Jun 2016

4 2 1

9:08pm

40 min

Piszczek is not deterred and attacks on his own up the  
right twice in 30 seconds, first time pulling back the  
cross that Portugal scramble clear then booming one on  
the run from the touchline that loops over Fonte and  
reaches Lewandowski shortly after the bounce with Pepe  
in close pursuit. Had he had the time nor space to  
fashion a finish from 10 yards. Good work by Pepe.

9:06pm

47 min

Biaszczykowski goes up the right, shifts the ball inside  
with a deft pass but Renato Sanches whisks it away from  
Milik. Krychowiak wins it back and passes it out to  
Piszczek who looks for his former HSV team-  
mate Biaszczykowski but the old right-wing telepathy is  
absent tonight and the ball goes out as a run is misread.

9:04pm

40 min

We've off again, both sides unchanged. Cedric chips a ball  
up the right with too much force and it skids off the slick  
turf through to Fabianski.

9:00pm

Here's Portugal's goal

In glorious animation form:

Portugal goal



8:51pm

Half-time entertainment

Why not have a crack at winning a Kia by sticking a few  
pens past David James? Portugal did in 2004, so why  
can't you? Have a go [here](#).

8:49pm

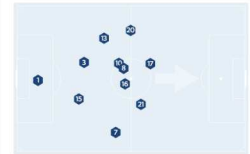
Proactive Czechs pin the Turks back

Check out these average touch graphics, which illustrate  
the success of the Czech pressing:

Czech Republic average touch positions



Turkey average touch positions



8:48pm

Half-time

Nobody's happy with this - except Northern Ireland. A  
fury start from the Turks, but the Czech Republic  
steadily grew into it and ended the half dominating  
possession, if not the scoreboard.

8:46pm

45 minutes

Mor driven back into his half and has to prod it back to  
Babacan. Again, the Czechs win it back, and if Nedic had  
got onto that cross from Dockal the scores would be level  
now.

One added minute.

8:44pm

43 minutes

Pisiel redeems himself somewhat for his yellow by  
launching a scorcher at Babacan. The keeper parries but  
it's an ominous warning shot for the Czechs, who are  
gathering strength.

8:41pm

40 minutes



That's it Northern Ireland. And then  
survive the first half onslaught of  
world champions were seriously p  
Gomez should have scored about f  
so on.

Well played Norm Iron!



6:48pm

80 mins - 2

The ball bounces around the North  
area again, falls to Ozil and he snap  
right foot but it flies wide.

6:45pm

80 mins

Gomez picks up a loose ball just ou  
but it's straight at McGovern again  
today, the goalkeeper, but so many  
have been taken straight at him.

Germany shots



6:44pm

88 mins

Michael O'Neill doesn't look happy  
technical area. Ozil finds Kimmich  
Cathcart clears, McGinn can't keep  
ball around and start again.

6:41pm

88 mins

Aberdeen forward Niall McGinn is  
lilies taking shots and is good at fre  
a chance to grab that magical equal  
a shot from 25 yards, striking the b  
and watching it whistle just over th

6:38pm

84 mins

Germany build up play beautifully  
goalkeeper all the way to Northern  
leads the way, cutting open the de  
Kimmich on the right wing. He co  
defender with the fake cross, then  
for Gomez... great save by McGove

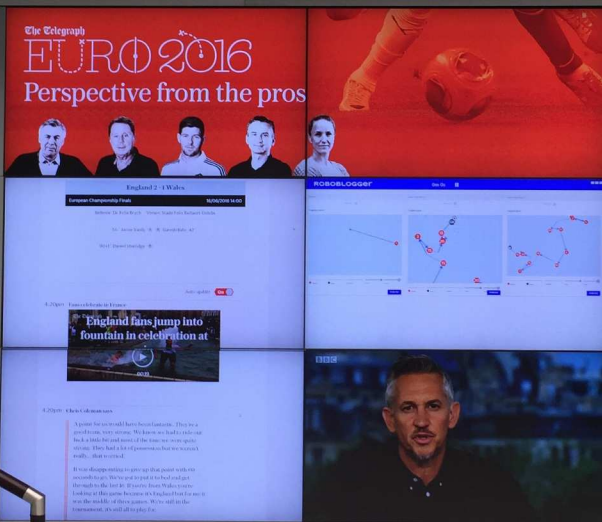
Germany passes







# telegraphmediagroup



2016 competitions

**15 - 20 GRAPHICS PER MATCH + CLOCKWATCH**



Dashboard

**HOME TO ALL THINGS ROBOBLOGGER**

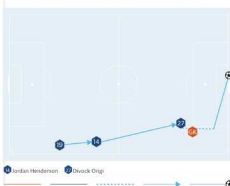
90 + 6 min

Bournemouth 4

Liverpool 3

## EVENT CHAINS (REDUCED)

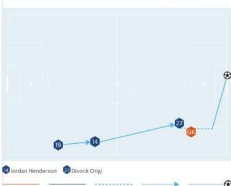
Bournemouth 0 - 2 Liverpool (Divock Origi, 22 min)



PUBLISH

## EVENT CHAINS (FULL)

Bournemouth 0 - 2 Liverpool (Divock Origi, 22 min)



PUBLISH

## SHOTS ON GOAL (HOME)

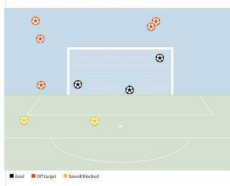
Bournemouth shots against Liverpool



PUBLISH

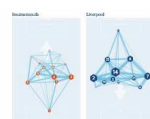
## SHOTS ON GOAL (AWAY)

Liverpool shots against Bournemouth



PUBLISH

## PUBLISHED



## SHOTS ON GOAL (BOTH)



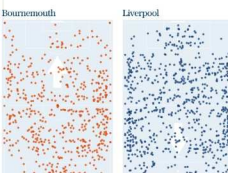
PUBLISH

## SHOTS BREAKDOWN SUMMARY



PUBLISH

## TOUCHMAP



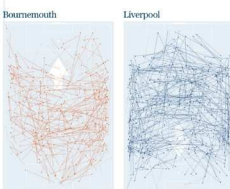
PUBLISH

## TOUCHMAP



PUBLISH

## PASSES



PUBLISH

## \*ESTIMATED\* GOAL LINE SHOT PATH



PUBLISH

## TIME ON BALL (LAST 15 MINS)



PUBLISH

## TIME ON BALL (CUMULATIVE)



PUBLISH

90 + 5 min

Crystal Palace 2



Liverpool 4

90 + 4 min

West Ham 1



Arsenal 5

90 + 5 min

Leicester 2



Middlesbrough 2

90 + 4 min

Spurs 5



Swansea 0

90 + 4 min

Leicester 2



Club Brugge 1

90 + 3 min

Arsenal 6



Ludogorets Razgrad 0

90 + 4 min

Man City 3



Barcelona 1

90 + 5 min

Legia Warsaw 3

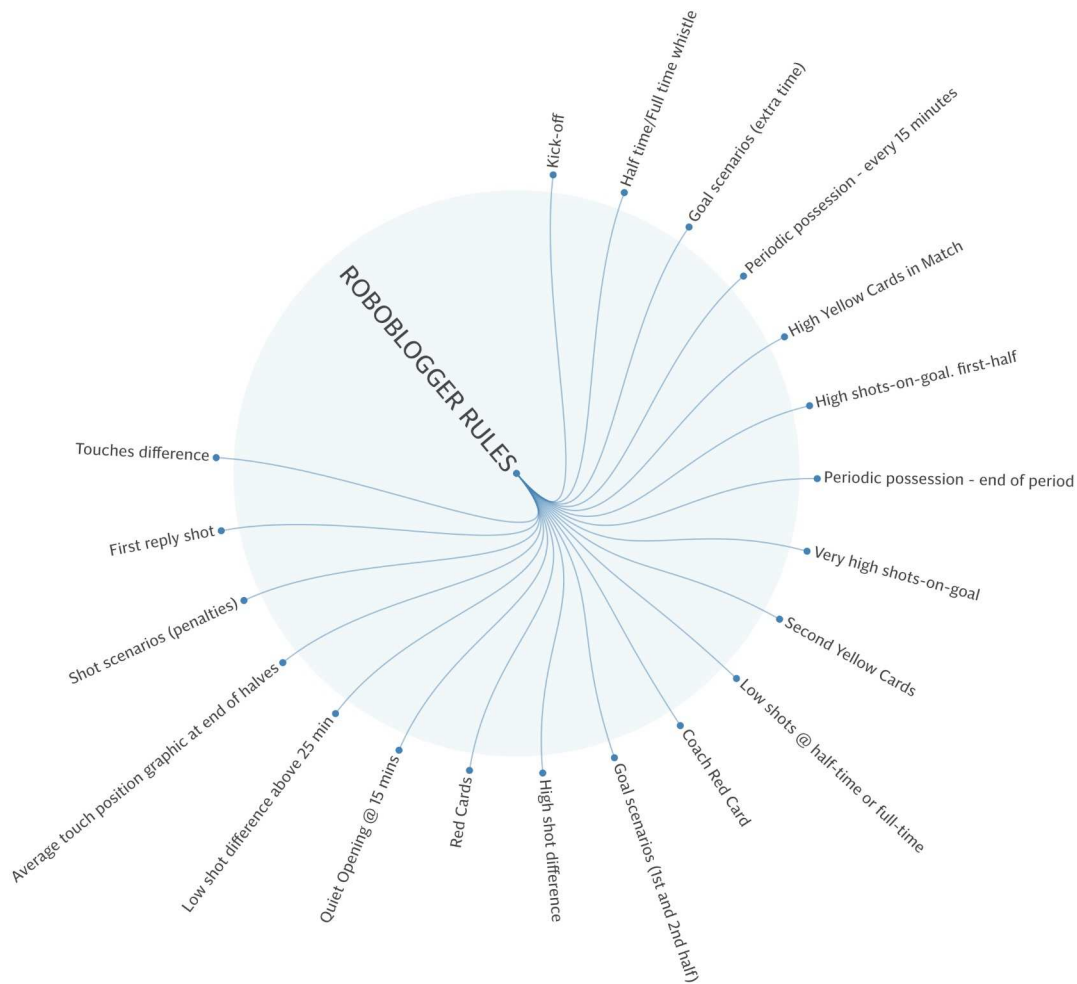


Madrid 3

Rules

**DO A GOAL!**

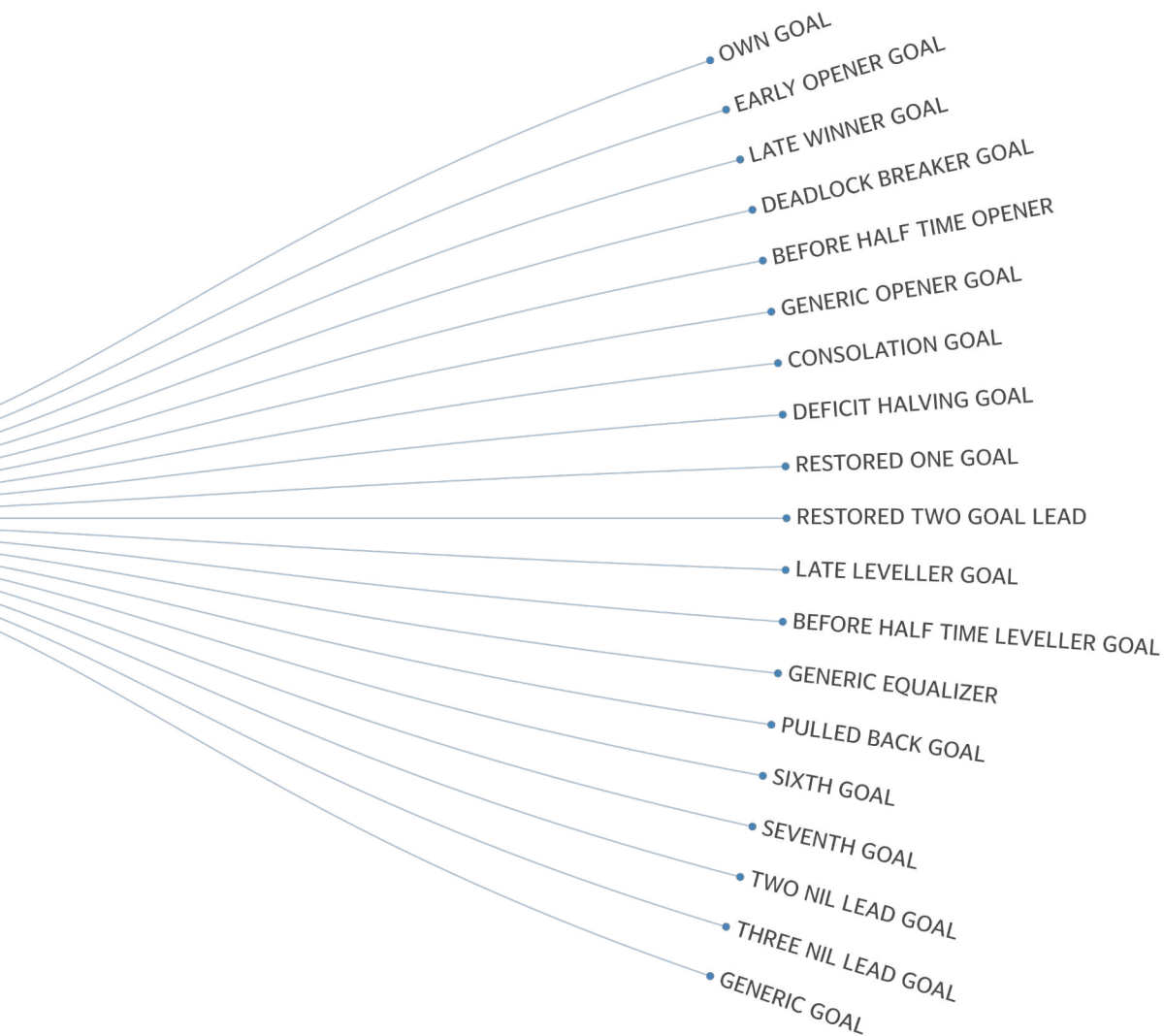




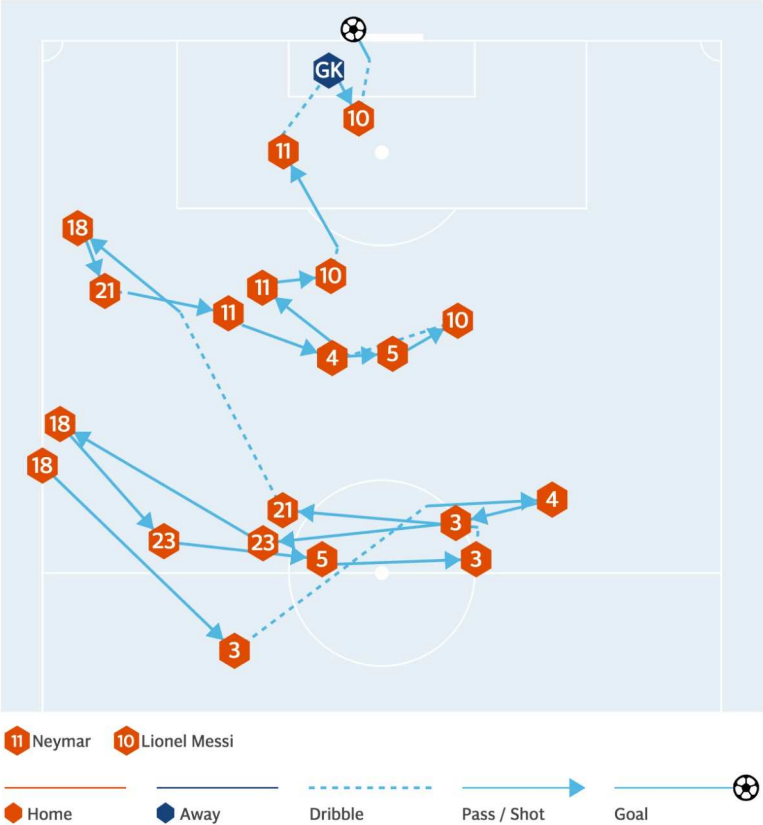
## **WHEN A GOAL IS SCORED**



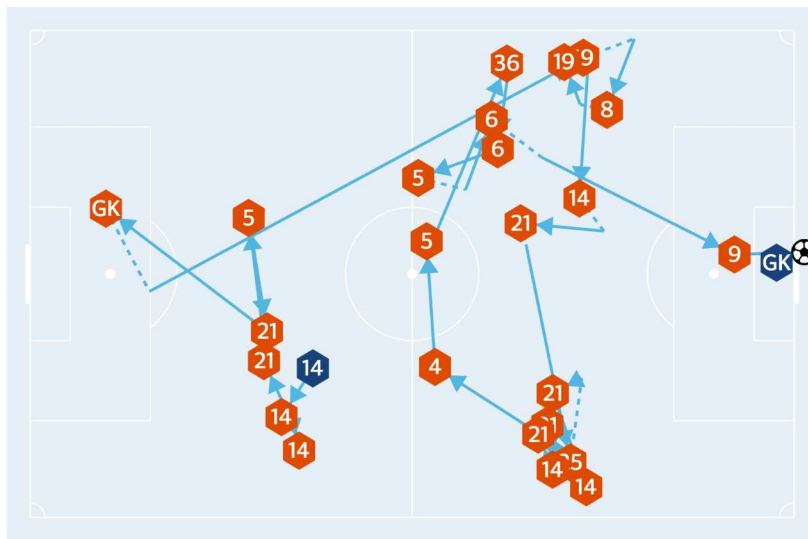
It is matched with one of 19 scenarios...  
each with multiple text and graphic templates.



Barcelona 2 - 0 Celtic (Lionel Messi, 27 min)



Man Utd 1 - 1 West Ham (Zlatan Ibrahimovic, 21 min)



6 Paul Pogba 9 Zlatan Ibrahimovic



Oh, to be human

**TAKING THE 'ROBO' OUT OF ROBOBLOGGER**

5:32pm

**GOAL!**

Burnley have pulled a goal back through Sam Vokes to make it 3-1!

Goal: Southampton 3 - 1 Burnley (Sam Vokes, 72 min)



9 Sam Vokes



5:04pm

**Second half start**

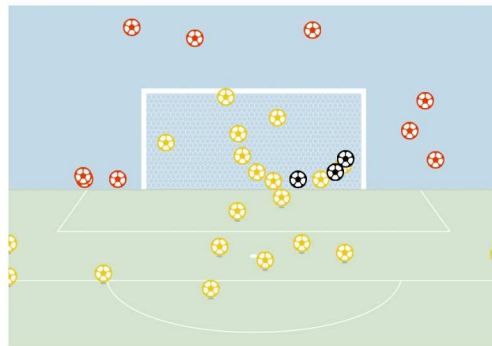
It's the start of the second half for Southampton vs Burnley

5:49pm

**Southampton are all over Burnley**

The home side have been peppering Burnley's goal in the match so far - they have attempted 32 shots with 12 of them on target.

**Southampton shots**



■ Goal ■ Off target ■ Saved/Blocked

5:12pm

**GOAL!**

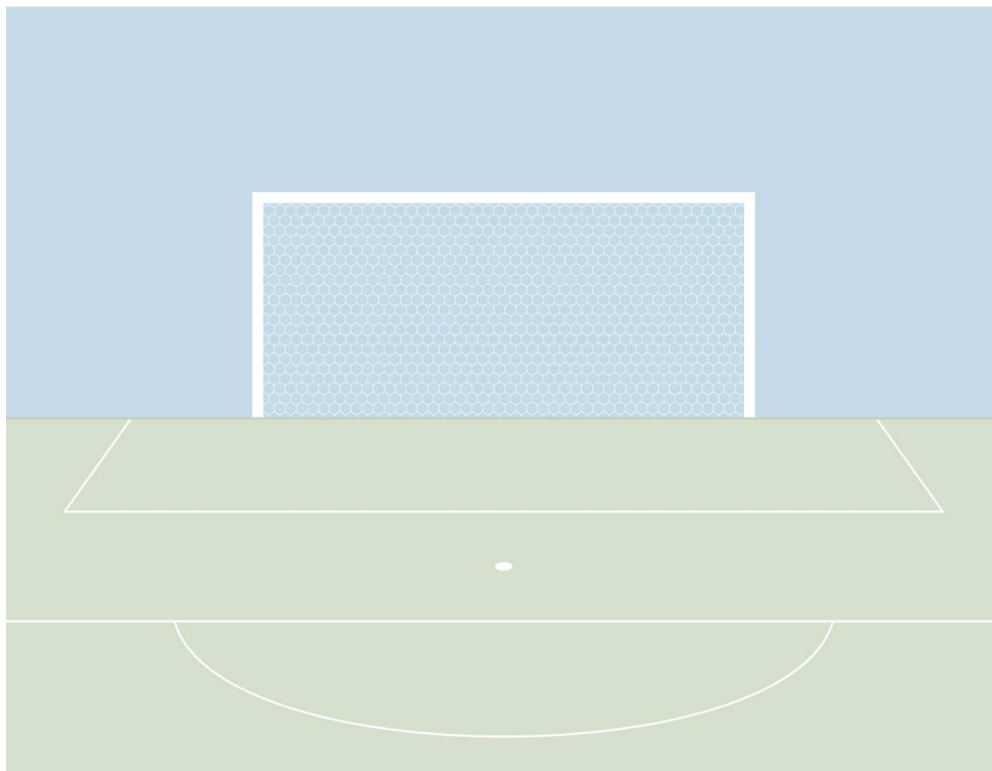
1-0! Charlie Austin has broken the deadlock for Southampton!

Goal: Southampton 1 - 0 Burnley (Charlie Austin, 52 min)



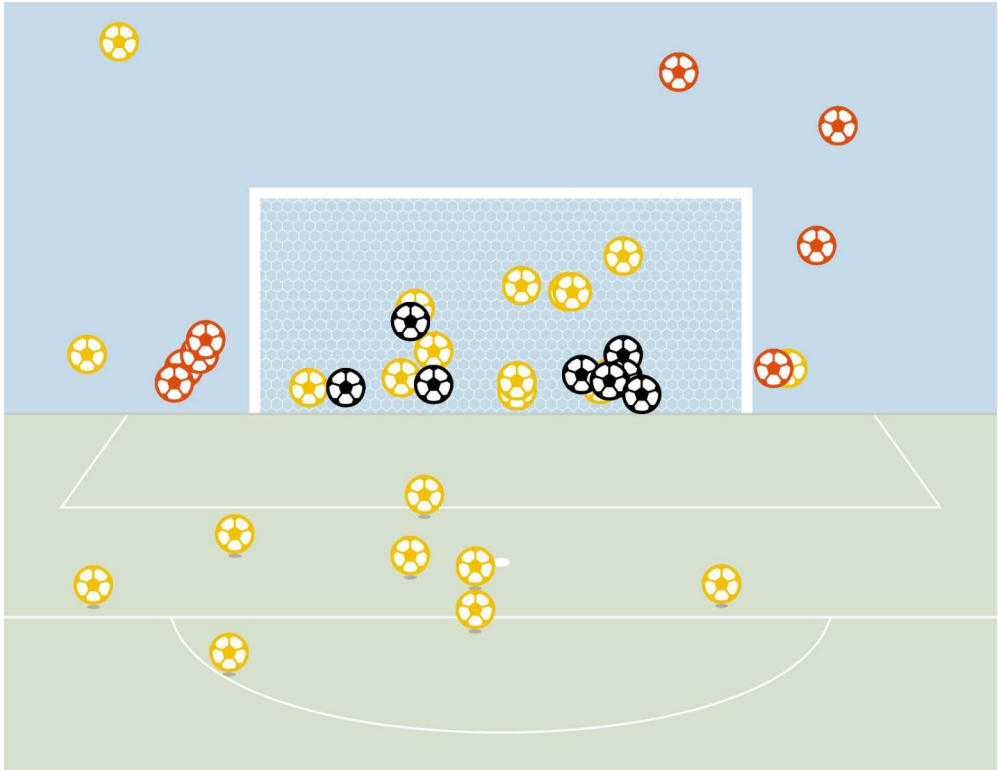
14 Oriol Romeu 10 Charlie Austin





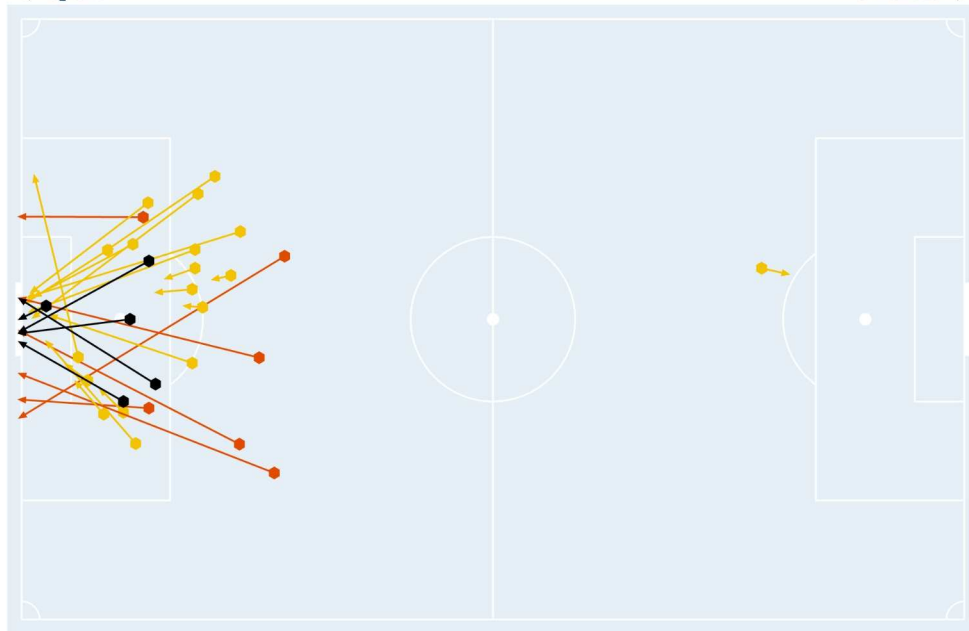
San Marino v Germany





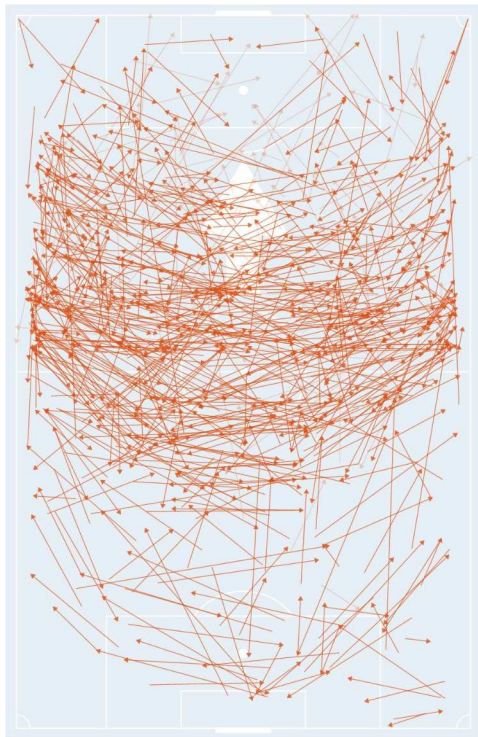
← Spurs

Swansea →

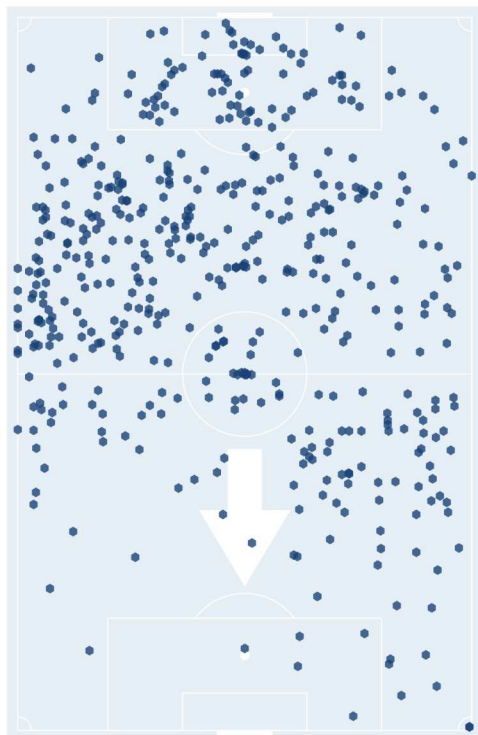
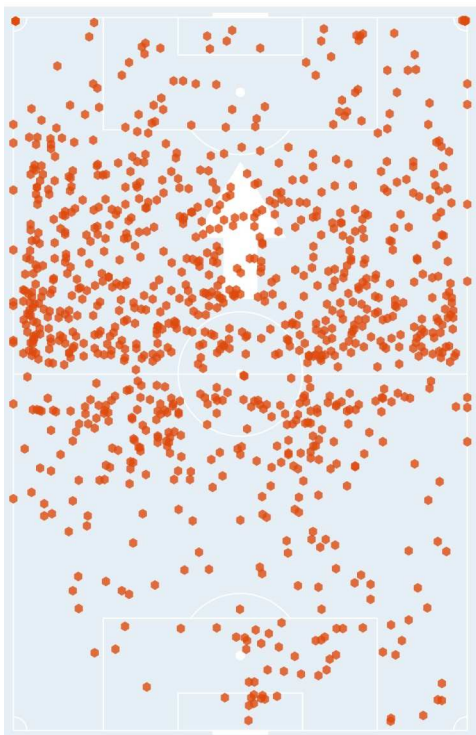


■ Goal ■ Off target ■ Saved/Blocked





Barcelona v Celtic



Bournemouth



Liverpool

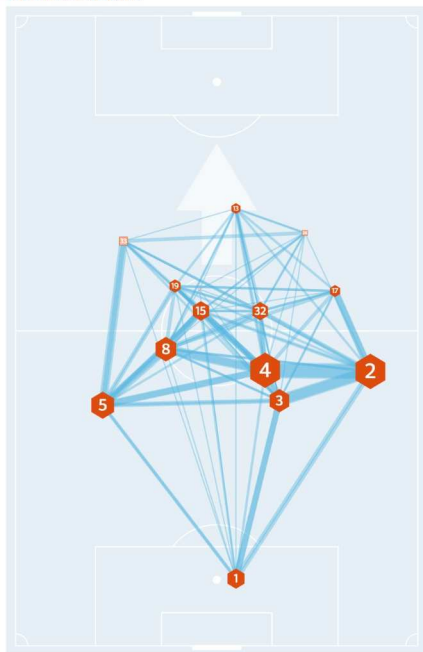


Starter



Substitute

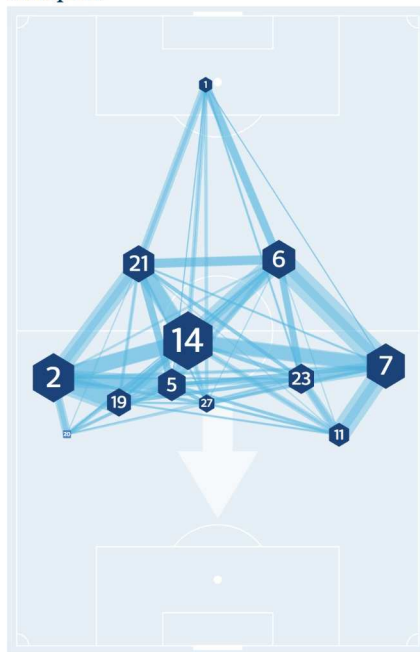
Bournemouth



Starters

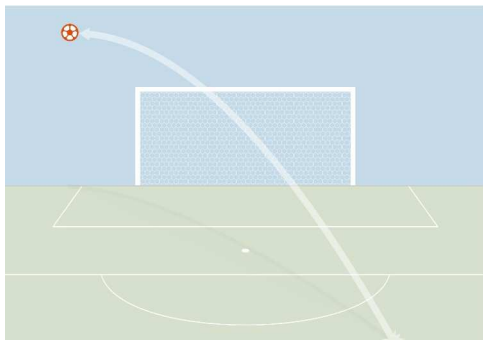
Substitutes

Liverpool



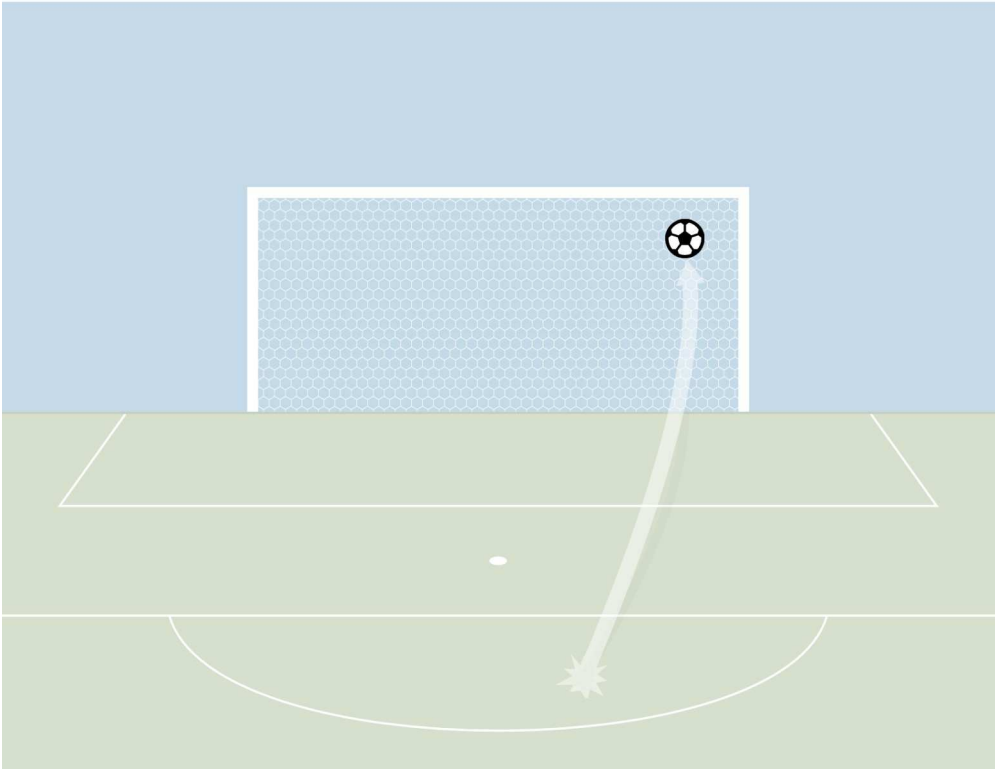
More passes

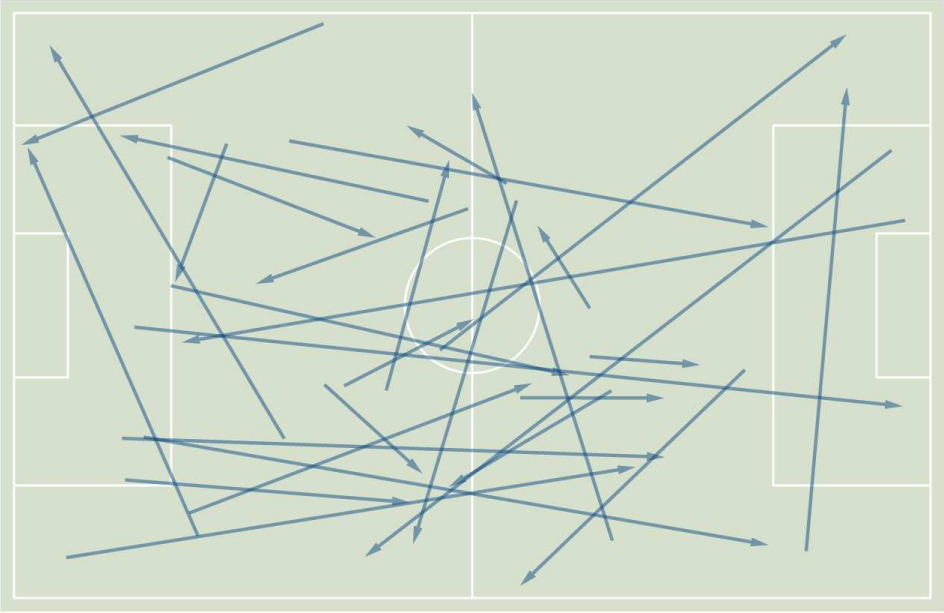
Fewer passes

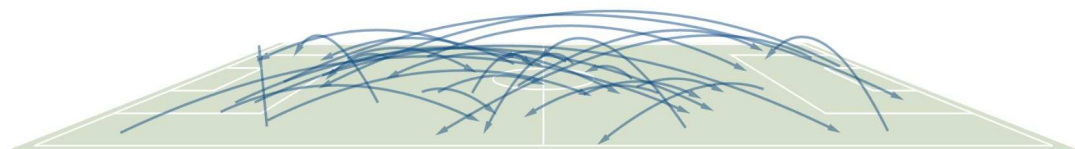


Liverpool target practice

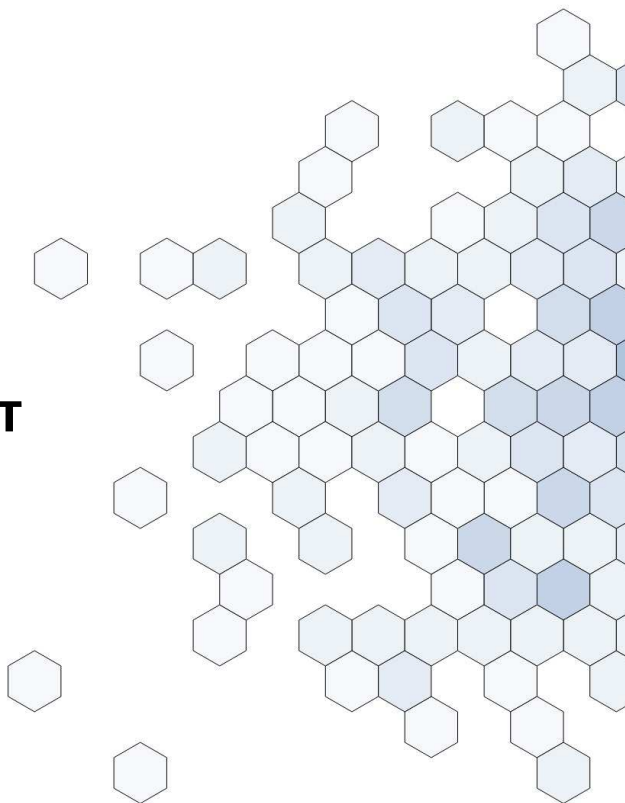


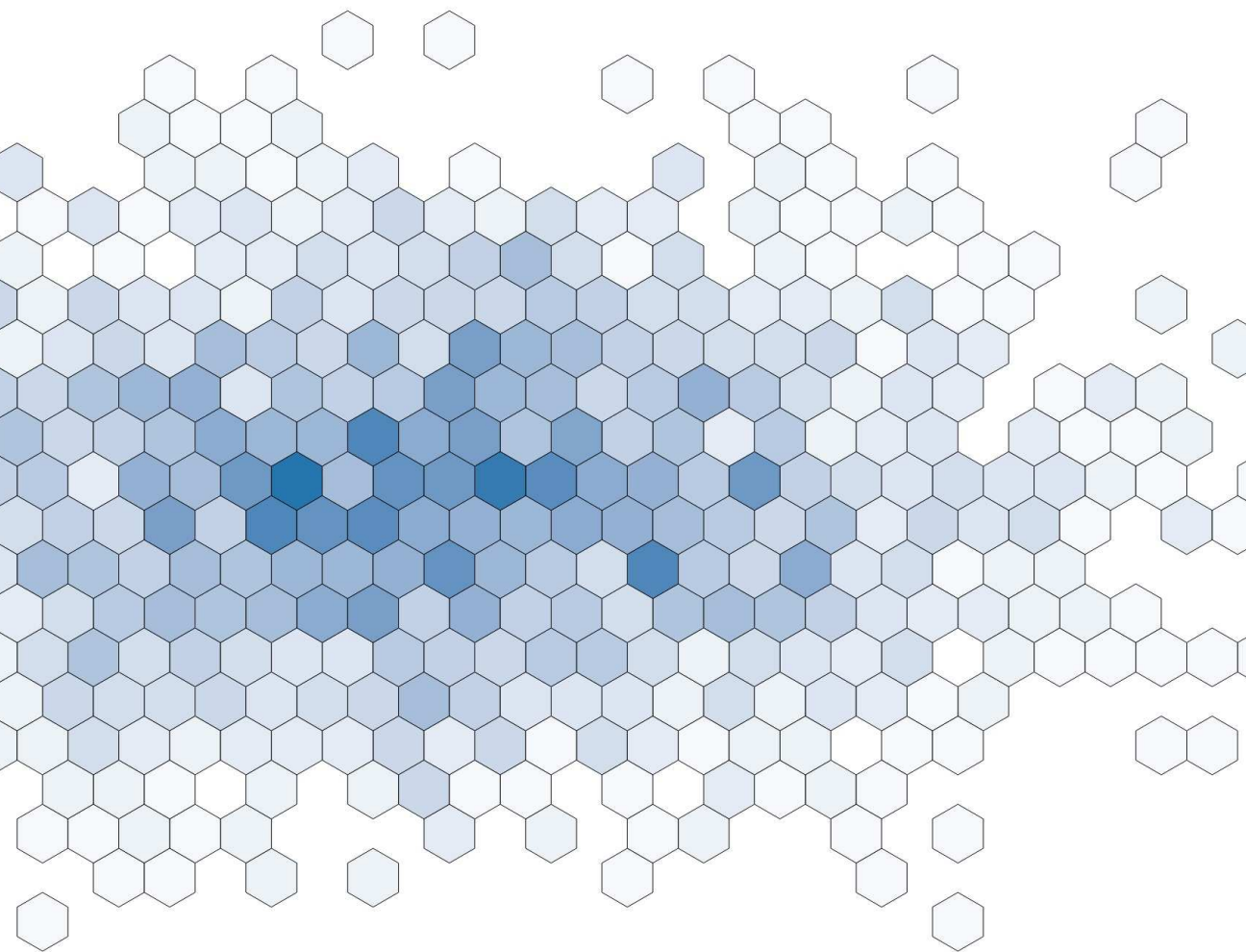


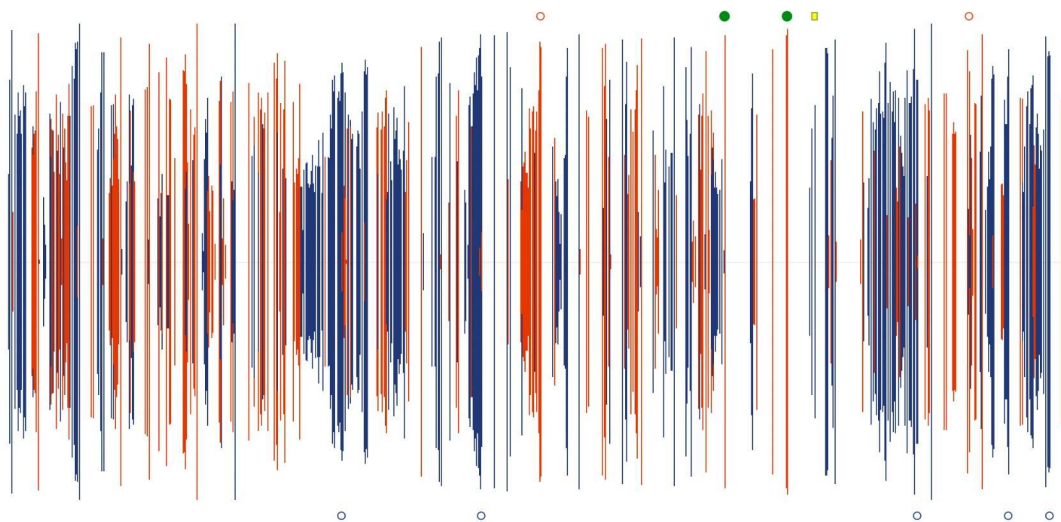




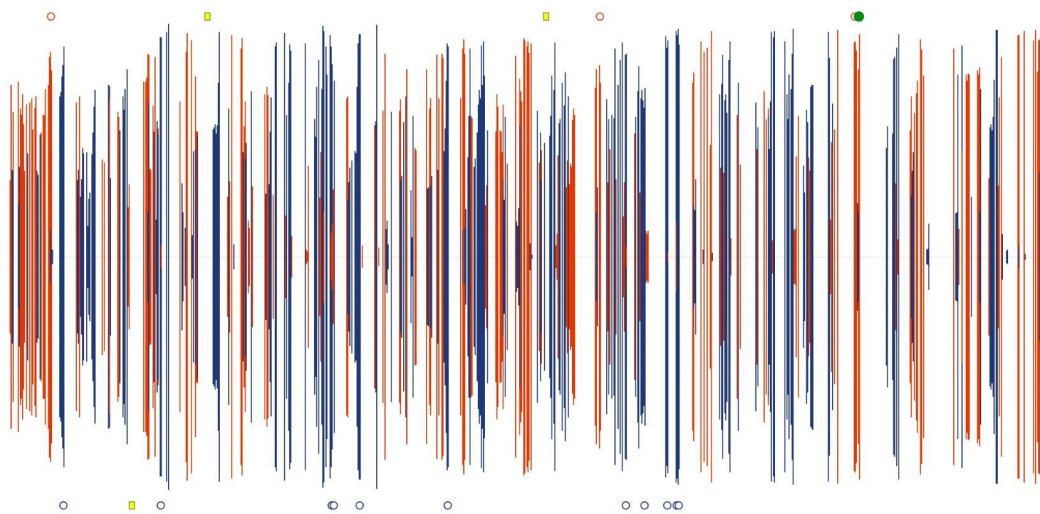
Modern Art  
**ROBOBLOGGER THE ARTIST**

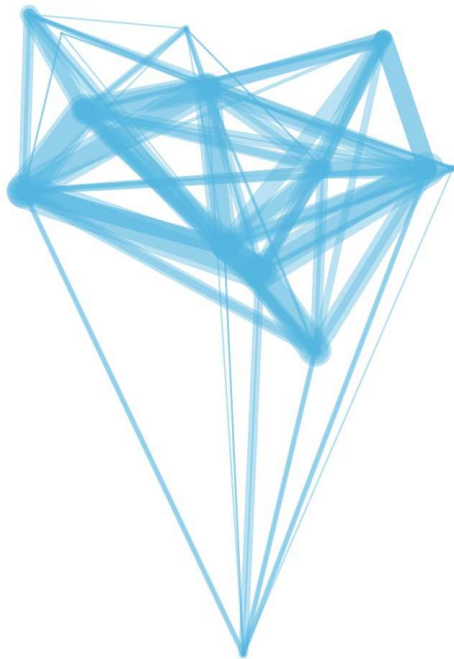






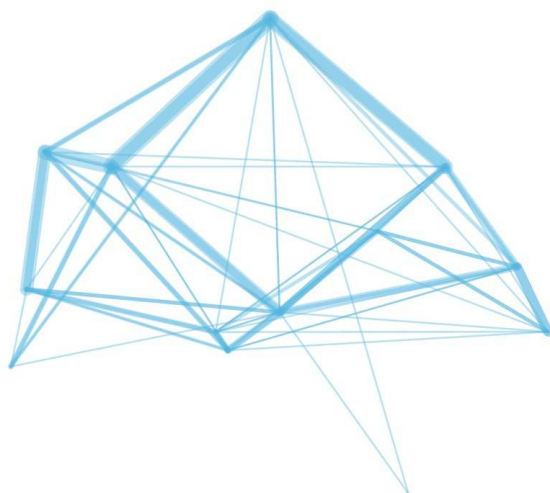
Sound of the match - Crystal Palace 3 v Southampton 0





Spain v Liechtenstein







Cy Twombly (1971) v Roboblogger (2016)




# **THANK YOU**

TELEGRAPH SPORT EDITORIAL  
EDITORIAL INNOVATION PLATFORM  
TELEGRAPH DESIGN  
GOOGLE  
OPTA

AND ALL THE INDIVIDUALS THAT MADE ROBOBLOGGER POSSIBLE

**DIGIDAY** UK



## The Telegraph built a tool that auto-creates graphics of Premier League goals

Lucinda Southern | August 30, 2016

The Telegraph has made changes to its sports data-visualization tool so interactive graphics are created and published on site automatically each time a football goal is scored.


“We were trying to solve two problems: how to produce sports visualizations in real-time, and how to automate and save time,” said Malcolm Coles, director of digital media at Telegraph Media Group. “For this we needed to set up a rules engine to analyze data without the journalist even realizing that the story had happened.”

The Telegraph’s graphics tool was created for the Rugby World Cup last year to generate interactive graphics of the game play. Earlier this year the Telegraph received €300,000 (\$345,000) in funding from Google’s News Initiative to develop it further, and it switched to make graphics of how goals happened. Since mid-August, in time for the Premier League, these graphics can be created and published automatically each time a goal is scored.

Google Europe

@googleeurope · Aug 22

Love how @Telegraph's tech team has automated real-time graphics for ⚽ coverage. [goo.gl/WBh4e](https://goo.gl/WBh4e) #Roboblogger #DNIInnovationFund



**Premier League clockwatch: follow all the goals with our Roboblogger**

We'll be bring you goal-by-goal updates here throughout the afternoon from all four 3pm games.

[telegraph.co.uk](http://telegraph.co.uk)

1


5

8

...

**Nieman** Fellowships Reports Lab Storyboard

## NiemanLab



### The Telegraph is trying to streamline soccer live blogging with an automated graphic system





